



SCIENCE GOES CULINARY

New Proteins – New Food
Recipe Collection

Acknowledgment

Step into a culinary journey that bridges the past and the future of proteins! This recipe book is the outcome of a public engagement campaign of the NextGenProteins Cooking Box initiative and includes a diverse and very creative selection of recipes thoughtfully created by both professional chefs and enthusiastic home cooks. This collection does not only celebrates tradition but also showcases the art of fusing time-honored protein sources with novel alternatives resulting in innovative dishes that pay homage to the classics while embracing innovation.

We extend our heartfelt gratitude to all those who have contributed their expertise, passion, and time to make this recipe book a reality. Your dedication has woven a tapestry of flavors and ideas that brings richness to every page. With each recipe, you have shared a piece of your culinary soul, and your efforts have truly transformed this collection into a celebration of gastronomic diversity. Thank you for embracing the challenge of blending tradition with the cutting-edge, and for allowing us to showcase the remarkable results in this recipe book. Your commitment has not only enriched our culinary horizons but also those of countless individuals who will savor these dishes for generations to come.

ABOUT THE NEXTGEN PROTEINS PROJECT

Meeting Protein Demand Sustainably through Innovative Technologies

Demand for proteins is increasing for food and feed applications. Production will have to double by 2050. However, the current protein production, both animal- and plant-based, leads to negative environmental impact – e.g. greenhouse gas emissions, land and water use and biodiversity loss.

Moreover the European Union is not self-sufficient when it comes to protein production and a large proportion of the demand is currently met by importing proteins – despite concerns regarding food security and competitiveness. It is therefore of vital importance to develop alternative protein sources that can be sustainably produced in quantities that meet the growing demand.

NextGenProteins has identified microalgae, single cell protein and insects as three promising sources of alternative proteins that can be produced through innovative and environmentally sustainable bioconversion processes using scarcely used by-products of the food and forest industry.

Through collaboration between industry and research, the NextGenProteins project addressed during the four last years, the key barriers that currently prohibit or limit the application of these three alternative proteins.

The project demonstrated the suitability and economic viability of the alternative proteins in food and feed value chains and explored their market opportunities with the industry, stakeholders, policy makers and consumers.

Birgir Örn Smárason

Research Group Leader for Sustainability & Aquaculture, background in Environmental Science and Resource management at Matis Ohf. His main research expertise is the innovation and development of alternative and sustainable proteins and environmental impacts in food value chains.



Surprise!



The cooking box is here....Unboxing!

What's in this cooking box?

- ⇒ ARBIOM SYLPRO Torula Yeast (a yeast-based protein powder)
- ⇒ EntoSus Cricket Hack (an extrudate of pea and fava bean proteins and cricket flour)
- ⇒ Vaxa Icelandic Ultra Spirulina Green or Blue (a coloring solution from Spirulina algae)
- ⇒ A secret ingredient

What's the task?

- ⇒ Create 1 - 3 recipes and use all the ingredients from the cooking box.
- ⇒ Quantity, type and combination of these and any additional self-chosen ingredients are up to you



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ROULADE OF GUINEA FOWL AND CRICKET ON CARROTS MOUSSE

guinea fowl brest | EntoSus Cricket Mince | VAXA Spirulina Blue | potatoes | carrots

Preparation

Step 1: Roulade

700g guinea fowl breast
200g (soak in broth) EntoSus Cricket Mince
250ml cream
VAXA Spirulina Green
vanilla salt

1. Clean the guinea fowl breast, slit lengthwise (do not cut through) and plate
2. Process into a mass the soaked mince of crickets with 50g guinea fowl breast and the cream, color with spirulina to get your desired color. After that season the mass with vanilla salt.
3. Spread the final mixture onto the guinea fowl breast and roll up
4. The roulade will be vacuumated, sous-vide-cooking for one hour at 64°C
5. Before serving, cut it into slices

Step 2: Carrot mousseline & potato cubes

800g organic carrots
vegetable stock for cooking
1 tbs SylPro Yeast
50 g butter
vanilla salt
2 potatoes
oil for frying/roasting

1. Peel the carrots, cut into pieces and boil into the vegetable stock, then drain the liquid and leave a little bit for the puree)
2. Puree finely the soft carrots with the butter, SylPro and a little bit of vegetable stock (depending on the desired consistency) and season with vanilla salt.

Potato cubs

1. Peel potatoes und cut into little cubes
2. Fry/roast the cubes with a little bit of oil in a frying pan

Step 3: Caper cream & fried capers

1 small glass of (70g-90g) capers
200 ml cream
corn starch for binding the sauce
Salt, pepper, sugar
oil for frying of the capers

1. Boil up the cream with the liquid of the glass of capers; season with salt, pepper and sugar and thicken with corn starch
2. Fry the capers (put it on a kitchen towel until it's time to serve)

Step 4: Spirulina foam

200 ml milk
VAXA Spirulina Blue
sat

1. Heat the milk with spirulina and a little bit of salt (blue – depending upon the color), after that use a hand-held-blender or a cream syphon to foam up

Decoration suggestions:

- rocket, cress, peaks of rosemary, basil and mint, cherry tomato, fried capers

Andreas Eigner

My name is Andreas Eigner. I was born and raised in the center of Berlin. After school I absolved a training as a housekeeping assistant at Lette Verein Berlin. After that I completed my training as a chef at Hilton Hotel Berlin (under top-trainer Thea Nothnagel). Then I worked in the field of event and congress catering at Sarah Wiener GmbH, where I have risen to chef guard manager.

Since March 2011 I work as a freelance event chef and food stylist. I have realized many food styling projects, I participated in major projects of the leading catering companies. I was represented at several trade fairs, where I carried out show cooking for different companies. Furthermore, I organized numerous events for customers. In addition, since 2022 I am co-founder of the company "HomeEvent – Die Eventmacher".





FARMER'S STEW WITH CRICKET MINCE, LENTILS AND VEGETABLES

EntoSus Cricket Mince | potatoes | lentils | tomato paste | garlic - red peppers

Ingredients

100 g EntoSus crickets mince (soak with broth in a ratio of 1 to 4).

2-3 cloves of garlic chopped

3- 4 tablespoons tomato paste

500 g waxy potatoes

4 carrots diced

2 large vegetable onion diced

3- 4 red pointed peppers

150 g red dried lentils

1000 ml vegetable broth or more to desired consistency

1 bunch each of fresh parsley and thyme, rosemary, oregano

1 tsp paprika sweet

1 teaspoon hot paprika

3 tsp dark miso paste

40 g Arbiom SYLPRO Torula Yeast (yeast based protein powder)

3 tsp MASAWI Cinnamon Blossom Chocolate Salt

2EL olive oil or other vegetable oil for frying optional

120 ml red wine

2 bay leaves

Preparation

1. Wash the potatoes thoroughly and cut into bite-sized pieces. Also wash the peppers, remove the seeds and cut into small cubes. Peel and coarsely chop the onion.

2. Grill mince in vegetable broth (soak in a ratio of 1 to 4), then put in a colander, drain.

3. Heat olive oil in a large pot and fry the barbecue mince in it until crumbly. Add onions and sauté for 2 minutes until translucent. Then add garlic and tomato paste and sweat for 30 seconds. Then deglaze with red wine and boil down briefly.

4. Add potatoes, carrots and bell pepper and sauté for about 1-2 minutes.

5. Put the lentils into a fine-mesh sieve and rinse under running water. Add to the pot along with the spices and sautéed vegetables and mix everything well. Pour in the vegetable broth, add bay leaves and simmer the stew for about 20 minutes until the potatoes and lentils are cooked. Then taste, add seasoning if needed, and remove the bay leaves. (If you like, you can thicken the stew a bit. To do this, mix 2 teaspoons of cornstarch in a little water, then stir into the stew and bring to a boil).

6. Season to taste with the cinnamon chocolate salt. If you like the stew spicier or even spicier, you can add a little chili or ajvar.

7. Sprinkle with parsley and thyme and serve with a good baguette.

Tips

Grilled mince or the lentils can also be replaced with cooked beans, chickpeas, finely chopped mushrooms, eggplant, zucchini, soy granules or sunflower mince, crumbled tofu or another meat alternative.

Instead of red wine, you can also use a little more vegetable broth and /-, or white vinegar or add a few small chopped pickles.

The peels/trimmings of leeks, carrots, tomatoes, parsnips, onions, bay leaf, juniper berries boiled with a little water makes a great vegetable stock. This is sustainable and healthy. To create a nice rich color, 2 half onions sharply fried in a greaseless pan and added.

Wolfgang Blum

I trained as a chef and butcher, then excelled as a Chef de Partie in St. Moritz, Chur, Paris, and Berlin. Military service included sergeant training and leading troop kitchens. Business studies and officer training followed, with roles at the Army Supply School, optimizing catering in foreign operations. As department head, I developed specialized military catering for foreign missions. I led the Bundeswehr cooking team, retiring as staff captain. A Culinary Education Master's and self-employment as a food consultant ensued. I became a Senior Expert at SES Bonn, educating in Uzbekistan, Ukraine, Mongolia, Ethiopia. I also trained as a fish sommelier at Fish Academy Bremerhaven.





ORIENTAL EGGPLANT AND TOMATO DIP WITH CRICKET MINCE

eggplants | EntoSus Cricket Mince | tomatoes | garlic | paprika powder - parsley

Ingredients

400 g eggplants
500 g tomatoes
4 cloves garlic
½ bunch parsley
½ bunch cilantro *
60 g EntoSus Crickets Mince (soak with broth in 1 to 4 ratio).
20 g Arbiom SYLPRO Torula Yeast (yeast based protein powder)
2 tsp paprika powder
3 tsp cumin
2 tsp MASAWI cinnamon flowers chocolate salt
8 tbsp. olive oil
2 tbsp. freshly squeezed lemon juice
3 tsp dark miso paste
1 Ds chunky /chopped tomatoes

Preparation

1. Halve the eggplant, score it slightly on the inside with a knife, then press the peeled/halved garlic cloves into this opening.

2. Place the eggplant skin side up on a baking sheet, place it on the top rack in the oven set to 220 degrees top heat/grill for 20-25 minutes. The heavily roasted skin will create a nice roasted aroma, remove before proceeding

3. Score the tomatoes crosswise, put them in lightly boiling water for 2-3 minutes, then remove, rinse in cold water and peel off the tomato skin. Cut tomatoes in half, remove seeds with a spoon, finely dice flesh and mix with previously chopped herbs

4. Crickets Soak minced meat in vegetable broth (in a ratio of 1 to 4), then put in a colander, drain.

5. Put oil in a pan, fry crickets mince, add tomatoes, herbs and spices, simmer gently over medium heat for 10 minutes. Fold in the contents of the tomato can.

6. Remove the flesh of the eggplant from the skin and chop to your taste and fold into the crickets mince/tomato sauce. Stir in Arbiom Yeast Extract to enhance the flavor.

7. Add lemon juice and cinnamon chocolate salt to taste. Serve lukewarm or cold with extra herbs and olive oil as topping.

Tips

Cilantro gives the dip that unique flavor. The cooking process makes it taste much more pleasant than fresh. If you don't like cilantro, increase the amount of parsley accordingly.

The peels/trimmings of leeks, carrots, tomatoes, parsnips, onions, bay leaf, juniper berries boiled with a little water makes a great vegetable stock. This is sustainable and healthy. To create a nice rich color, 2 half onions sharply fried in a greaseless pan and added.



BLUE AND GREEN OCEAN BURGER WITH CRICKET MINCE AND WASABI SALMON

EntoSus Cricket Mince | black beans | dark miso paste | white mushrooms | wasabi cinnamon flowers

Ingredients

150 g EntoSus crickets mince (soak with broth in a ratio of 1 to 4)
1 Ds black beans
120 gs of panko
1 red onion
30 g Arbiom SYLPRO Torula Yeast (yeast based protein powder)
2 tsp MASAWI cinnamon flowers chocolate salt
1 tsp dark miso paste
4 tbs olive oil
Alternative: 50 g cornstarch/ 1 egg
1 tsp cumin
150 g white mushrooms
50 g walnuts
1 tsp thyme
Burger sauce
2 tbs mayonnaise
1 tsp mustard, medium hot
25 g cashew nuts
½ red and yellow chili pepper
1 be natural yogurt

Buns

250 g wheat flour type 550
75 g soft butter
30 g sugar and 1 tablespoon honey
4 g salt
15 g yeast, fresh
45 ml each milk and water
0.7 ml each of Vaxa spirulina solution green and blue
Topping:
12 slices wasabi salmon
1 head of radicchio lettuce
2 tomatoes
1 red onion

Step 1: Preparation Buns

1. Mix yeast with 1 tablespoon honey, mix buns ingredients and knead into a smooth dough.
2. Let rise in a warm place. Knead half of the dough with Vaxa Spirulina solution green and half with Vaxa Spirulina

3. solution blue and let it rise further, form buns and let them rise again.
3. Bake at 180 degrees (hot air) for about 18-20 minutes.

Step 2: Preparation Pattys

1. Soak crickets mince in vegetable broth (in a ratio of 1 to 4), then put in a colander, drain., drain beans.
2. Puree 2/3 of the beans with the miso paste, Arbiom yeast extract and spices with a blender until fine.
3. Chop mushrooms, walnuts and onion very finely, sauté over medium heat for about 6 minutes and season. Mix crickets mince, remaining beans, panko with the pureed mixture. Season to taste with the cinnamon chocolate salt. If you like the paddies hotter or even spicier, feel free to add a little chili.
4. Form the minced mass in a patty former, fry with hot olive oil on both sides for about 5 minutes.

Step 3: Preparation burger sauce

1. Soak cashews for 4 hours, blend with the ingredients of the burger sauce with a blender and season to taste.
2. Cut open the baked buns, spread with the burger sauce, cover with tomato slices, onion rings and radicchio leaves. Top each burger with 3 slices of wasabi salmon and the fried paddy, serve.

Tips

1. Beans can also be substituted with cooked lentils, chickpeas, eggplant, zucchini, crumbled tofu or another meat alternative.
2. If necessary, to increase the binding, you can fold in the cornstarch or alternatively the egg.



CALAMARI TUBES

STUFFED WITH A FARCE OF CRICKET MINCE

calamari | anchovy fillets | EntoSus Cricket Mince | egg | garlic - parsley

Ingredients

1-1.2 kg of squid medium size, tube length about 10 cm
2 lemons organic quality
4-5 anchovy fillets
1 bunch of flat leaf parsley
1-2 sprigs of rosemary
50 g EntoSus crickets mince (soak with broth in ratio 1 to 4)
1 egg
2 cloves garlic
pepper
Extra virgin olive oil
10 g Arbiom SYLPRO Torula Yeast (yeast based protein powder)
2 tsp MASAWI cinnamon flowers chocolate salt
1 chili bell pepper or 1 red bell pepper
50 panko

Preparation

1. Preheat the oven to 200 degrees.
2. Wash the fresh squid thoroughly under cold water, carefully peel the skin from the tube, pull out the head with the tentacles, remove the backbone. Wash the inside of the tubes well as well. Cut off tentacles below the eyes. Discard head and the innards.
Alternatively, buy at the fishmonger you trust.
3. Wash the lemon, dry it and grate the peel, setting it aside. Sprinkle squid tubes from the inside with a little lemon juice and set aside.

4. Chop the tentacles and anchovy fillets, put them in a bowl, add the cricket mince

5. Mix anchovies, crickets mince with finely chopped tentacles, parsley and needles of 1-2 sprigs of rosemary. Add the grated lemon zest, 3 tablespoons bread crumbs (panko) and 1 egg, Arbiom SYLPRO Torula Yeast (yeast based protein powder). Squeeze 2 more cloves of garlic on top and mix everything together well. Finally season with a little MASAWI Cinnamon Blossom Chocolate Salt.

6. Grease an ovenproof dish with a little olive oil. Fill the squid tubes with the prepared mixture, but not too bulging, so that they do not burst in the oven. Close the opening of the tubes well with kitchen twine or toothpicks.

7. Place the stuffed squid in the mold, lightly score with a knife in the shape of a checkerboard pattern, brush with olive oil, sprinkle a little cinnamon flowers chocolate salt little rosemary on top.

8. Cook the squids for about 25 minutes in the oven at 180- 200 degrees, brushing several times with a little olive oil

Serve immediately with lemon slices and enjoy.

Recommendation

Garnish with lemon zest and basil leaves, serve with zucchini rice.



PAK CHOI - CRICKET MINCE PANCAKE

baby pak choi | carrots | wheat flour | protein powder | spring onions

Ingredients

4 small baby pak choi
100 g carrots
2 spring onions
150 g wheat flour type 550
30 g Arbiom SYLPRO Torula Yeast (yeast based protein powder)
5 g baking powder
20 g potato or corn starch
80 g EntoSus Grillen Hack (soak with broth in a ratio of 1 to 4)
2 tsp curry powder
1 tsp salt
3 tbs olive oil,
1 tbs white balsamic vinegar

Mint Cinnamon Blossom Chocolate Yogurt

2 tsp MASAWI cinnamon blossom chocolate salt
200 ml natural yogurt
1 bunch of fresh mint leaves
0.05 g Vasa spirulina powder, green

Preparation

1. Grate/slice pak choi and carrots very finely with a mandoline/knife. Cut spring onions diagonally into rings about 0.5 cm wide.

2. Soak the crickets mince in vegetable broth (in a ratio of 1 to 4), then put it in a colander, drain.

3. Mix the grated / finely chopped vegetables with the cricket mince, flour. Mix starch, yeast extract, baking powder, curry, salt and balsamic vinegar. to get an even, smooth batter. Add a little more broth if needed.

4. Heat olive oil in a frying pan. Spoon the batter into the pan, spreading 4 pieces a little wide apart. 5. Fry on both sides for 5-6 minutes each over medium heat, The pancakes should form a nice brown crust on the edges.

6. Whisk the yogurt with the remaining ingredients and season to taste. Depending on color preference, the proportion of Vasa Spirulina powder green can be slightly increased/adjusted. Cut mint leaves into very fine strips and fold in.

7. Serve with the remaining mint leaves as garnish.

Tips

Alternatively, the addition of finely chopped jalapeños, chilies, chopped herbs, (as a flavor alternative) in the yogurt would be possible.

Ingo Gäbler

*Trainer Seafood Akademie und Fischsommelier IHK (2017)
Gelernter Koch und Küchenmeister
Leiter im Seefisch Kochstudio
Projektleiter Bremer Ratskeller anno 1405
Leiter des Einzelhandels bei Fiedlers Fischmarkt anno 1096
Trainer in der Seafood Akademie, Food Stylist und Trendscout
Einer der ersten Fischsommelier IHK*





André Hasenkamm

André Hasenkamm is owner and head chef of Redingerhof 188, a fine-dining restaurant in Bad Lippspringe (Paderborn) and one of the top three traditional inns in the federal state of North Rhine-Westphalia. André Hasenkamm has worked on various sous and head chef positions in Germany, Austria and Switzerland before he took over Redingerhof 1887 in 2014. His cuisine can be described as modern German-French. All ingredients are of regional origin and he loves to combine traditional with modern and sustainable preparation and cooking methods.



GRYLLOIDA ROULADE OF BEET

dill - cream cheese | beet - apple - vinaigrette | apple - mustard - caviar | arbiom - hip | dill oil

Preparation

Step 1: Red beet cricket roulade

700 ml beetroot juice freshly pressed | 100 ml water | 150 g cricket flour | 1 tbsp. Sylpro | 1 g purple curry | 5 g lemon juice | 5 g vanilla salt | 1 tbsp. brown sugar | 2 g coriander seed | 2 g Szechuan pepper | 2 g ginger, ground | 2 g Fennel seed | 1 chopped red onion | 1 chopped garlic | 3 tbsp. olive oil | 4 eggs | 100 ml cream | 1 tsp. nutmeg | 50 g panko | 20 g EntoSus crickets minced, ground

Red beet stock

1. Grind and lightly roast the spices
2. Deglaze with water leave to reduce
3. Fill up with beet juice and boil up
4. Strain the juice and season with lemon juice, sugar, sylpro and vanilla salt.
5. Pour the hot, strained juice over the cricket flour and leave it to brew for about 30 minutes
6. Squeeze the cricket flour lightly and put it in a cool place

The roulade

1. Sauté the red onion and the garlic lightly in olive oil
2. add the red beet crickets minced and sear it likewise
3. Season the mass to taste with purple curry, vanilla salt, pepper, nutmeg and sylpro
4. Put the mass in a cool place for about 30 min.
5. Add 4 whisked eggs and the cream to the mass
6. Puree the mass with a blender until a farce is created
7. Add panko and the cricket minced flour to the farce and knead everything well
8. Wrap the farce tightly into cling film and then again in aluminum foil and refrigerate it for 3 hours
9. Following, steam the farce in the Combi at 110 – 120 degrees until a core temperature of 90 degrees is reached

Step 2: Beet apple vinaigrette

100 ml beetroot juice | 2 tbsp. olive oil | 100 ml apple juice | 4 tbsp. apple vinegar | 1 tbsp. chives | 2 tsp. mustard | 2 tbsp. lime juice | 1 tsp. garlic | 1 tsp. wasabi powder | 1 tsp. Sylpro Yeast | 1 pinch vanilla salt, pepper, brown sugar | 1 pinch xanthan

1. Puree all ingredients with a blender
2. Season to taste with salt, pepper, sugar and sylpro

Step 3: Dill cream cheese

500g cream cheese | 50 g dill chopped | 1 pinch Vaxa spirulina green | 50 ml lemon juice | 3 sheets gelatin

1. Soak the gelatin in cold water for about 20 minutes, squeeze well and dissolve it in warm lemon juice
2. Mix the cream cheese with dill and spirulina
3. Stir the lemon-gelatin-mixture into the cream cheese quickly
4. Season to taste with salt and pepper
5. Put the cream cheese in silicone forms and freeze for about 4-5 hours

Step 4: Apple - mustard - caviar

100 g mustard seeds | 300 g apple vinegar | 3 tbsp. brown sugar | 1 tsp. vanilla salt | 2 laurel

1. Wash the mustard seeds in a fine sieve with warm water
2. Boil up the apple vinegar with sugar, salt and the bay leaves in a pot. Add the mustard seeds, put the lid on the pot and let everything simmer for about 15 minutes
3. Remove the bay leaves and fill the mustard seeds in two clean glasses (approx. 250 ml). Close the jars while still hot and let them cool down at room temperature

Step 5: Dill oil

100 g dill | 150g sunflower oil | 1 pinch Vaxa spirulina green

1. Mix dill, spirulina green and the sunflower oil for 8 minutes at 50 degrees in a Thermomix
2. Then strain the mixture through a coffee filter and place it in the refrigerator to chill hot and let them cool down at room temperature

Step 6: Serve

1. Cut the cricket roulades into 3 pieces and place them centered onto deep plates
2. Turn the dill cream cheese out of the silicone form and place it centered onto the roulade
3. Garnish with apple caviar, venne cress and affila cress
4. Mix the vinaigrette with the dill oil and pour it into the deep plates



CHEESE-LEEK

EntoSus Cricket Mince | leek | onions | cream cheese | chili pepper

Ingredients for 4 people

100 g EntoSus cricket mince
150 g leek
50 g onions
1 small chili pepper
170 g cream cheese
2 slices cheddar
Salt
Pepper
Gyros spice
500 ml vegetable broth
450 ml cooking cream
Add to half the ingredients Vaxa spirulina blue.

Mice in cream

100 g cricket mince
250 g mushrooms
50 g onion
100 g crème fraiche
100 ml cooking cream
Salt
Pepper
Paprika seasoning
1 tbsp. Stypro yeast extract

Ingo Rachner

I am 38 years old, chef with passion. I chose the profession of chef late in life. Before that I was a metal worker. During my time as a cook, I was able to look at various kitchens and practices. From a la carte restaurant to care centers. Now I am with the company Aramak in the company catering. I am always open to new things.





ZUCCHINI INVOLTINI

EntoSus Cricket Mince | tomato | nectarine | sesame | avocado & black garlic

Ingredients

1 medium zucchini
60g EntoSus cricket mince (not so finely ground)
2 egg whites
2 egg yolks
200ml tomato juice
½ tsp Ras el hanout
1 pinch turmeric
3g orange salt
6g sesame black
1/4 tsp salt
120g cream cheese
10g basil
salt,pepper, celery salt

Preparation

1. Soak cricket flour in tomato juice including ras el hanout, turmeric and salt (approx.1hr).
2. Squeeze the cricket mixture well through a straining cloth.
3. Mix the slightly moist mass with the egg whites, sesame seeds and orange salt. Then chill for 30 min.
4. Mix cream cheese with chopped basil, egg yolk, salt pepper and celery salt until smooth.
5. Peel the zucchini with a peeler lengthwise (about 12-14 strips). Blanch in salted water for about 10 seconds. Quench in ice water and then drain well.
6. Prepare plastic wrap on countertop (about 40x30cm).
7. Place zucchini strips on it, slightly overlapping. Spread the basil cream cheese thinly on the zucchini strips.

8. Place the cricket mixture at the bottom of the zucchini strips in the shape of a sausage (diameter approx. 2.5cm).
9. Carefully roll up with the foil and close tightly on both sides. In addition, wrap once again in aluminum foil (close tightly).
10. Cook in steamer at 100 degrees Celsius for about 17min.
11. Then cool completely in the refrigerator, carefully unwrap and cut into the desired shape.

Garlic Aioli

2 black garlic cloves
1 egg yolk
1 tsp mustard
1 tsp lime juice
180ml olive oil
salt, pepper, celery salt to taste

1. Finely puree everything except the oil and pass through a fine sieve.
2. Pour the garlic mixture into a narrow measuring cup.
3. Add the oil.
4. With the blender, start blending at the bottom of the measuring cup and pull it up very slowly while blending until everything is combined and a uniform emulsion is formed.

Björn Bitzer

My name is Björn Bitzer, owner and chef of the restaurant ESSeriment in Delbrück. After my apprenticeship, many stations followed in Germany, among others at the gourmet restaurant Graf Leopold in the Kurfürstlichen Amtshaus Daun. For almost 5 years I was traveling the rivers of Europe as a kitchen and corporate chef. All these trips through the most diverse regions with an international crew have shaped my current style of cooking.

„The combination of the most different flavors, looks and textures result in the perfect moment of enjoyment for me.“

Since 2012, I let these experiences and impressions flow into the culinary of ESSperiment. At ESSperiment we offer an authentic, contemporary and above all flavorful cuisine. This is reflected in our menus in which we use seasonal, partly home-grown vegetables and many regional products and put in scene.





LEEK MINCE SOUP

EntoSus Cricket Mince | vegetable broth | soy sauce | leeks | garlic

Ingredients

Baguette
3 tbsp. oil
120g Ento Sus cricket mince (dry)
2 EL vegetable broth
1 dash of soy sauce
1 dash of Liquid Smoke (optional)
2 leeks
½ onion
1 clove garlic
700 ml water
2 pieces vegetable bouillon cubes
1 cup Crème fraîche, approx. 150 g
125 g processed cheese (optional)
1 tbsp. Sylpro yeast protein
1 pinch salt and pepper from the grinder
1 pinch nutmeg

Preparation

1. Cover the Ento Sus cricket mince with the triple amount of hot water and add 1 cube of vegetable broth, the soy sauce and optional some liquid smoke. Then let everything soak for about 20 minutes. After that strain and store the liquid.
2. Following put oil in a pot. Stew the onion and the garlic until translucent, add the cricket mince, fry it well on all sides and season with salt and pepper.
3. Clean the leek, cut into small rings and add it to the cricket mince. Sear for about 5 minutes on low heat. Pour in the water from the mince, add the remaining water and additional stock cube and simmer everything for about 10 minutes on low heat.
4. Stir in the processed cheese and let it melt.
5. Mix in the crème fraîche and bring to boil once again. Season the soup to taste with salt, pepper and nutmeg.
6. Slice the baguette and serve with the soup.

Tip

For decoration add some additional crème fraîche on the soup and a topping of the cricket mince, some fried leeks and chives.

Instead of the processed cheese and crème fraîche, you can also use oat or soy cream.

Felix Bonnert

After graduating, I worked in various positions for a German company with labels in the business areas consumer brands and adhesive technologies. Now I am a vegetarian hobby chef with an interest in exploring new ways of cooking and trying new things in the kitchen. I rarely or never cook by recipe and mostly work with matching flavors. On the side, I am a startup founder and currently looking for new ideas.





HACHIS PARMENTIER

EntoSus Cricket Mince | vegetable broth | potatoes | tomato paste | garlic

Ingredients

120 g Ento Sus cricket mince (dry)
2 tbsp. vegetable broth
1 dash of soysauce
1 tbsp. Herbs de provence
2 cloves garlic
1 onion
50 g tomato paste
2 tomatoes
1 dash red wine
10 g butter or margarine
1 pinch salt
1 pinch pepper, freshly ground
150 g cheese, grated, as you like, e.g. Emmental cheese

Ingredients for the puree

1 kg potatoes, starchy
55 g butter or margarine
200 ml milk or oat milk
1 pinch salt
1 pinch pepper, freshly ground
1 pinch nutmeg

Preparation

1. Preheat the oven to 190°C with both top and bottom heat.
2. Cover the Ento Sus cricket mince with three times the amount of hot water and mix in vegetable broth and soy sauce. Let it soak for about 20 minutes.
3. For the mashed potatoes, start by peeling the potatoes, washing them, placing them in a pot, and covering them with water. Bring to a boil and let them simmer for about 25 minutes until they are tender.
4. Meanwhile, put the butter and milk in a pot and heat them up.
5. Drain the cooked potatoes and mash them using a potato masher or a potato press.
6. Now, stir in the butter-milk mixture and season the puree with salt, pepper, and nutmeg. Set aside.
7. Peel and finely chop the onion and garlic. Melt the butter in a pan and sauté the onion and garlic pieces until translucent.
8. Strain the soaked Ento Sus cricket mince and add it to the pan, sautéing for about 5 minutes. Then add the tomato paste and tomatoes, and after about 3 minutes, deglaze with red wine. Season with salt, pepper, and herbs of Provence according to taste.
9. Now, spread the minced mixture in a baking dish, then distribute the mashed potatoes on top and finish by covering it with cheese. Bake the Hachis Parmentier in the preheated oven for about 25 minutes until golden brown. Et voilà, it's ready to be served.



SPIRULINA SPINACH ROLL

puff pastry | spinach leaves | cream cheese | Vaxa spirulina | garlic

Ingredients for 4 people

2 rolls refrigerated puff pastry
250 g fresh spinach leaves
1 package cream cheese
1 cup olive oil
2 cloves garlic
1 onion
1 pinch Vaxa spirulina
1 package shredded cheese
Salt and pepper

Preparation

1. Finely dice the onion and sauté it together with the garlic in olive oil. While still warm, mix in the cream cheese and spirulina, allowing them to melt and create a creamy paste. Season with salt and pepper.
2. Spread out the puff pastry and distribute the paste over it, followed by the fresh spinach leaves. Roll up the puff pastry along the short side.
3. Cut the roll into slices approx. 2-3 cm thick and place them on a baking sheet. Leave enough space between the slices to allow the puff pastry to expand.
4. Sprinkle the puff pastry slices with shredded cheese.
5. Preheat the oven to 200°C and bake the rolls on the middle rack for about 15 minutes, until the puff pastry turns a lovely golden brown.



CHARD-QUICHE WITH CRICKET MINCE AND SYLPRO YEAST

eggs | wheat flour | oat milk | tomatoes | oat cream

Ingredients

For the quiche dough:

1 egg
250 g flour
1/2 tsp. salt
3 tbsps. oat milk
130 g Alsan Bio (vegan butter)
40 g parmesan

For the filling of the quiche:

400 g chard
1/2 onion
8 cherry tomatoes
250 g oat cream
3 eggs
1 pinch nutmeg
10 g Sylpro Yeast

Pepper and salt according to preference

75 g EntoSus cricket mince (previously soaked in vegetable broth and seasoned with Danish smoked salt)

Preparation

1. Mix the flour and salt in a bowl.
2. Add the vegan butter (Alsan Bio) in small pieces and work it into the dough until a crumbly texture is formed.
3. Then add the egg, oatmilk and parmesan. Knead everything into a dough and form into a ball.
4. Wrap the dough in plastic film and let it rest for about 30 minutes in the refrigerator.

Preparation of the „cricket mince“- chard filling

1. Soak the cricket mince in the vegetable broth to hydrate and flavor it. Then, drain it well and season with Danish smoked salt.
2. Wash the chard, separate the leaves from the stems, and chop both roughly.
3. Finely dice the onion and cut the cherry tomatoes in half.

Preparation of the quiche filling

1. Heat some oil in a pan and sauté the onion until translucent. Then add the cricket mince mixture.
2. Add the chopped chard and sauté briefly until it wilts. Season with salt, pepper and nutmeg.
3. Let the vegetable mixture cool down.

Assemble the quiche:

1. Take the dough out of the refrigerator and roll it out on a lightly floured surface.
2. Line a quiche or tarte form with it and form a rim.
3. Evenly Spread the cooled chard-onion-mixture on the dough.
4. Distribute the halved cherry tomatoes on top.
5. In a bowl, whisk together oat cream, eggs, Torula yeast, salt and pepper.
6. Sprinkle the cricket mince mixture over the chard filling.
7. Pour the oat cream-egg-yeast-mixture over the filling.
8. Bake the quiche in a preheated oven at 180 degrees Celsius on convection mode for about 30-35 minutes, until the filling is set and the surface is golden brown.

Frieder Damm

Frieder Damm has been active as a founder, entrepreneur and stakeholder in the food and supplements sectors since 2014. In his private life, he is an enthusiastic hobby chef.





RHUBARB TIRAMISU

mascarpone | cream quark | sugar | white couverture| espresso

Preparation

Step 1: Rhubarb compote

400 g rhubarb
60 g sugar
½ vanilla pod
4 tbsp apple juice
1 tbsp cornstarch

Step 2: Cream

100 g white couverture
½ vanilla pod
400 g mascarpone
200 g cream quark (40% fat)
60 g sugar
4 tbsp. lemon juice
1 tsp lemon zest
200 ml whipped cream
50g Sylpro Yeast

Step 3: Sponge cake

120 ml espresso
60ml orange juice
60ml orange liqueur
200 g ladyfingers

1. Peel the rhubarb, cut it into pieces and simmer it with the sugar, the vanilla bean and the apple juice until the rhubarb is soft.
2. Mix the cornstarch with some water and thicken the rhubarb with it
3. Mix mascarpone, cream quark, pulp of the vanilla pod and the high protein powder
4. Lemon juice, sugar, lemon zest, sugar once boil, cool and then stir into the mascarpone, - curd mass
5. Melt white couverture and stir into the mass
6. Whip the cream until semi-stiff and fold it into the mixture.
7. Mix espresso, orange juice, orange liqueur
8. Layer a layer of ladyfingers in a baking dish, soak with the espresso mixture
9. Spread a layer of mascarpone cream on it
10. Repeat with a second layer
11. Place the tiramisu in the refrigerator overnight Dust with cocoa powder just before serving

Hilmar Rudolph

For over 30 years I have worked with dedication in the gastronomy. After training as a chef in the Black Forest, I now work successfully as an independent chef since 2009. The secret for this success: love for what I do.

Today I, Hilmar Rudolph, work in Berlin as a freelance chef for catering companies, am involved in charitable projects such as the children's cooking in the FEZ or the initiative „Nutrition and Exercise“ promoted by Aldi Nord and the German Children's Fund. In 2019 I founded the company HomeEvent together with Andreas Eigner with the aim to create unforgettable moments and to implement events.



SPIRULINA PANNA COTTA WITH ORANGE SALT AND BLUE SPIRULINA FOAM

cream | milk | sugar | Vaxa spirulina green | vanilla bean

Ingredients Panna Cotta

400 g cream (vegan)
600 ml milk
100 g sugar
2 vanilla bean(s)
8 leaves gelatin, white (vegetarian)
Vaxa spirulina green
Some orange salt

Foam (Espuma)

200g cream (vegan)
30g sugar
1 sheet gelatin (vegetarian)
Vaxa spirulina blue

Preparation

1. Boil cream, milk, vanilla pod and sugar together
2. Soak the gelatin in cold water, squeeze it out and stir it into the warm cream and milk mixture
3. Stir in green spirulina, depending on the desired color intensity
4. Fill the panna cotta into bowls
5. Boil the cream for the foam with the sugar, stir in the soaked gelatin
6. Stir in blue spirulina, depending on the desired color intensity
7. Pour the mixture into a foam bottle
8. Refrigerate both recipes



CRICKET MINCE CASSEROLE WITH TOMATO AND SWEET POTATO

cream | EntoSus Cricket Mince | sweet potato | tomatoes | onions - garlic

Ingredients

500g cream (vegan)
100g EntoSus cricket mince
500g tomatoes
50g onions
1 garlic clove
500g sweet potato

Preparation

1. Remove the strings from the tomatoes and cut them into small pieces
2. Cut the garlic and onions into cubes and sweat them
3. Add the tomatoes and let it simmer for 30 minutes, season with salt and pepper
4. Then puree
5. Soak the grilled mince, squeeze it and fry it with a little olive oil
6. Boil the cream, add salt, cumin to taste
7. Cut the sweet potato into slices and add to the cream, mix everything together
8. Layer all ingredients in a baking dish (minced meat, tomatoes, cream, potato mixture)
9. Bake in the oven at 140 degrees for about 45 minutes





Margrit Amelunxen

Freelance journalist, online editor and texter. Loves to eat and travel and to write about it. Lived in China for seven years, but has an almost lifelong love story with Italy.

How to get in touch with me?

Visit my website <https://textsandtales.com>

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RAVIOLI TRICOLORI AL GRILLO

eggs | durum wheat flour | celery | carrot | EntoSus Cricket minced meat

Step 1: Pasta dough

130g durum wheat pasta flour, often called "semolina"

130g wheat flour type 550, 405 or the Italian tip 00

3 eggs size M (or 150g)

1 teaspoon of olive oil

Salt

½ teaspoon Vaxa spirulina powder

½ teaspoon beet root powder

For each color I used half the amount of the basic recipe.

1. First, lightly whisk three eggs together so you can weigh exactly half of it for each color. Give the egg in two little bowls, add spirulina or beet root powder, whisk it lightly, doesn't need to be properly blended.

2. Put the right amount of the flower mix in a food processor, make a little well in the center, add oil, salt and the egg-color-mix. Knead it in the food processor for some minutes until you get a nice, elastic, smooth ball. Prepare the white pasta dough accordingly.

3. Cover all three separately and let rest in an airtight container for minimum 30 minutes.

Step 2: The filling

100g celery

100g onions

100g carrot

50g EntoSus cricket minced meat

Spices: "Sicilian orange salt" (or salt), chili flakes, chopped fresh parsley and oregano

½ teaspoon Sylpro Yeast

1 spoon cooking olive oil

1. Chop the vegetables in little cubes (or use a food processor) and let them gently stew in a pan with cooking oil for about 8 minutes until they are soft.

2. Meanwhile prepare the minced meat alternative like suggested on the pack. As ravioli require quite a homogenous filling, treat the rather coarse minced meat alternative in the food processor or a blender to achieve the desired fine result.

3. Put the pasty mass in the pan with the veggies, season with salt, chili (and yeast) and let it stew for some minutes.

4. When ready, you might want to use a blender again to make the filling more homogenous.

5. Add the fresh spices and let the mass cool down.

Step 3: Prepare the ravioli

1. There are several options: a pasta maker with the ravioli tool, the wooden "raviolatore" (checked rolling pin), ravioli cutters and others.

2. Roll portions of the dough with the pasta maker or a rolling pin (an Italian mattarello comes quite handy) to a sheet of about 1mm thickness. The next steps depend on the use of a pasta maker or a different ravioli tool. Check it out on YouTube if you are new to this business.

3. In any case you need to put the filling with a teaspoon into or onto the pasta sheets and proceed as required by your tool. Store ready ravioli under a towel on a tray with semolina to avoid sticking. Bring a soup kettle of salted water to boil. Add ravioli. Reduce heat to a gentle simmer, cook until ravioli float to the top and are tender. Takes approx. 5 minutes depending on the thickness of the dough. Take ravioli out with a pasta ladle and serve with your favorite sauce.

Step 4: 5-minute-pesto

Use about the same amount of parsley and basil (leaves and stems) and grated or chopped parmesan cheese. Add salt and a spoon of good olive oil. Garlic clove only if you want. Mix everything well in a blender, add some more oil if too coarse. E voilà.



CRICKET MEATBALL WITH POTATO MASH, PEA PUREE AND CARROT CREAM

EntoSus Cricket Mince | potatoes | butter | carrot | peas

Step 1: Cricket meatball

70g EntoSus cricket mince

210g water

10g egg yolk

10g breadcrumbs

salt/pepper/paprika powder

rapeseed oil for frying

1. First we soak the cricket mince with the water for about 30min.

2. Now we can add the egg yolk and breadcrumbs to the mince and knead it.

3. Season again with spices to taste and form into patties.

4. Now we heat the rapeseed oil in a pan and fry the meatballs until golden brown.

Step 2: Potato mash

500g potatoes

2 pieces of butter (about 50g)

50ml cream

salt, pepper & nutmeg

1. Peel the potatoes and cut into quarters, then put on with salted water.

2. When the potatoes are soft enough, drain them and mash them with a potato masher.

3. Now we gradually add cream and butter, season with salt, pepper and nutmeg.

Step 3: Jus

3kg bones

2carrots

1 head of celery

2 vegetable onions

200g tomato paste

1 bottle of red wine

1l vegetable stock

rosemary, garlic

1. Roast bones, in the time carrots, celery and onion cut into equal cubes, when the

bones are nicely roasted brown, the vegetables are added and it is roasted further.

2. Now add the tomato paste and roast briefly.

3. Deglaze with red wine.

4. Now let the red wine boil down and pour in the stock little by little.

Step 4: Pea puree

150g peas (frozen or fresh)

30g butter 100ml vegetable stock

Vaxa Icelandic Ultra Spirulina Green

salt / sugar

1. For this we put all the ingredients in a pot and let the simmer on low heat.

2. When the peas are soft, we can chop them with a cutter or Thermomix to achieve a stronger color, we have added some of the green dye. The mass is then passed through a fine metal sieve so that no hard pieces remain in the mass.

3. Now we fill this into a piping bag to be able to make dots.

Step 5: Carrot cream

150g carrots

30g butter

100ml vegetable stock

salt/ sugar

1. First peel and slice the carrots. Put the ingredients together in a pot and simmer covered.

2. When the carrots are soft, puree them using the Thermomix and pass them through a fine sieve.

3. Now pour into a squeeze bottle.

4. Clean and quarter the radishes, then simply sauté with a little butter and season with salt.

Steffen Neumann

WELCOME TO THE RESTAURANT PIER 6 BREMERHAVEN Greetings, my name is Steffen Neumann, a native of Franconia and a full-blooded gastronome for 30 years. During my career I have worked in various restaurants and hotels in both the north and south of Germany. I also gained sea-side experience as a steward on the MS Europa. Before my employment as manager of the multiple award-winning restaurant PIER 6 in Bremerhaven, I occupied the position of restaurant manager and sommelier in a renowned star restaurant of a hotel.





ORIENTAL MINCE PAN

EntoSus Cricket Mince | onions | protein powder | wok vegetables | turmeric

Ingredients

100g EntoSus minced cricket meat
50g fresh onions
20g protein powder
1kg wok vegetables frozen
5g pinch of Sicilian orange salt
20g vegetable stock
5g turmeric

Preparation

1. Soak the cricket mince in water and vegetable stock powder, add the protein powder.
 2. Sauté the onion cubes, add the cricket mince, wok vegetables and turmeric.
 3. Seasoning.
- Goes well with rice or noodles.

Bernd Nordengrünn

*Student Union Bremen
Operations Manager Mensa/Cafeteria Bremerhaven
Trained chef and kitchen master*

*On the board of the Koch-Club-Bremen e.V., branch association of the Chefs of Germany
Examination boards of the Chamber of Commerce for Bremen for chefs, kitchen specialists, specialist trainees*

*Technical committee of the Chamber of Commerce for Bremen and Bremerhaven
Seminar leader for trainees of inab - youth, education and profession
Member of the competence team for Milram/DMK*



PROTEIN PATTY

EntoSus Cricket Mince | protein powder | oat flakes | onion | peas

Ingredients

100g EntoSus minced cricket meat
2mg Vaxa spirulina green
20g protein powder
50g 8 herbs frozen mix
5g pinch of Sicilian orange salt
250g oat flakes
30g Mondamin
50g peas frozen
50g edamame frozen
20g vegetable stock powder
50g fresh onions

Preparation

1. Soak the cricket mince in water and vegetable stock powder, add the protein powder.
2. Sauté the onion cubes, add the cricket mince, peas, edamame and salt.
3. Add Tk herbs at the end.
4. Then put on the oatmeal and let it sit, add mondamin to bind if needed, as well as the green spirulina.
5. Shape and fry.



BLUE CURACAO PROTEIN DRINK

orange juice | Vaxa spirulina blue | protein powder | orange | mint

Ingredients

*2l orange juice
Vaxa spirulina blue
40g protein powder
pinch of Sicilian orange salt
garnish orange, mint leaf, skewer*

Preparation

1. Mix orange juice, colouring and protein powder.
2. Add a pinch of orange salt to the rim of the glass.
3. Garnish e.g. wooden skewer with mint and orange.



PROTEIN DRINK POWER DETOX

soy drink | protein powder | mixt herbs | Sicilian orange salt

Ingredients

2l soy drink
Vaxa spirulina green
40g protein powder
200g 8 herb mixture frozen
pinch Sicilian orange salt

Preparation

1. Mix the soy drink, colouring and protein powder.
2. Add a pinch of orange salt.
3. Add herbs and puree.



PROTEIN YOGHURT GREEK STYLE

greek yoghurt | honey | protein powder | Sicilian orange salt | Physalis - mint

Ingredients

1200g greek yoghurt
100g honey
Vaxa spirulina blue
40g protein powder
pinch Sicilian orange salt
garnish physalis, mint leaf, skewer

Preparation

1. Mix yoghurt with honey, colouring and protein powder.
2. Sprinkle with a pinch of orange salt.
3. Garnish e.g. wooden skewer with mint and physalis



MINCEMEAT GYROS STYLE

EntoSus Cricket Mince | onions | protein powder | gyros spice salt

Ingredients

150g EntoSus minced cricket meat
100g fresh onions
20g protein powder
1kg gyros spice salt
5g pinch of Sicilian orange salt

Preparation

1. Soak minced crickets with water and gyros spice, add protein powder.
2. Sauté the onion cubes, add the cricket mince.
3. Fry.
4. Serve with tomato rice, chips and tzatziki.



MINCE PAN BOLOGNESE STYLE

EntoSus Cricket Mince | fresh onions | protein powder | tomatoes | oregano

Ingredients

150g EntoSus minced cricket meat
100g fresh onions
20g protein powder
265g peeled tomatoes
5g pinch of Sicilian orange salt
5g freeze-dried oregano

Preparation

1. Soak cricket mince with water and spices, add protein powder.
2. Sauté the onion cubes, add the cricket mince.
3. Add tomatoes and simmer.
4. Goes well with pasta and rice.





BAKED CHICKPEA TOFU WITH YEAST PROTEIN

chickpea flour | Sylpro Yeast | turmeric | garlic | olive oil

Step 1: The tofu

120g chickpea flour

2g turmeric

15g Sylpro Yeast

750ml water

Step 2: The garlic confit

1 bulb of garlic

olive oil

Preparation

Chickpea tofu

1. Grease a mold (e.g. GN1/3) with olive oil and provide.
2. In a large saucepan, bring 375ml of water to the boil.
3. In a separate bowl, mix 375ml of water with chickpea flour, yeast protein and turmeric.
4. Once the water boils, whisk in the flour mixture vigorously.
5. Reduce the heat and cook the mixture for about 5 minutes, stirring constantly, until it has the consistency of solid pudding.
6. Pour the mixture into the prepared mold and smooth it.

7. Refrigerate for at least 24 hours. The longer the tofu chills, the firmer it will become - up to three days is possible.

8. Use the firmed tofu cut into cubes.

Garlic Confit

1. Peel the garlic and put it in a small pot.
2. Cover with olive oil and confit over low heat for about 1 hour.

Tofu Baking

1. Use about 1/4 of the garlic confit, including the oil, as a marinade. To do this, crush the garlic cloves with a fork.
2. Turn the tofu cubes in this marinade so that they are well covered.
3. Bake the marinated tofu in a preheated oven at 210°C circulating air until the surface is golden brown and crispy (about 30 minutes).
4. Serve the baked chickpea tofu as warm as possible, ideally with a fresh salad.

Jakob Repp

Jakob Repp is an entrepreneur from Berlin. While still studying Philosophy and Economics in Bayreuth, he founded a food startup and developed balanced organic drinking meals. With sleep.ink, he developed the first sleep drink with melatonin and sold the company together with his co-founders to a medium-sized pharmaceutical company in 2021. After a foray into strategy consulting, he is currently preparing to launch the next project.





CHILI WITH CRICKET PROTEIN

Sylpro Yeast | chlorella powder | onion | tomato pasta | mushrooms

Ingredients

For soaking the protein extrudate:

50g extrudate

15g vegetable broth powder

5g Sylpro Yeast

0,5g chlorella powder

boiling water

olive oil for frying

For the chili

100g onions, diced

10g garlic, finely chopped

20ml olive oil

65g tomato paste

240g quail beans, cooked

240g kidney beans, cooked

240g chickpeas, cooked

240g corn, cooked

800g canned tomatoes

250g mushrooms, quartered

6g Pepper

2,5g ground chili

10g smoked paprika powder

Salt to taste

Preparation

1. In a bowl, mix the extrudate with vegetable broth powder, chlorella and Sylpro Yeast. Pour boiling water over it and let it soak for 5 minutes.

2. Drain the soaked extrudate through a sieve and drain well.

3. In a large saucepan, heat the olive oil and sauté the diced onions until translucent. Add the finely chopped garlic and sauté briefly.

4. Add the tomato paste to the pot and sauté briefly. Deglaze with the canned tomatoes.

5. Add pepper, ground chili and smoked paprika powder.

6. Add quail beans, kidney beans, chickpeas and corn to the pot and mix well. Simmer the chili over low heat.

7. In a separate pan, sauté the quartered mushrooms with a little oil until golden brown. Then add them to the chili in the pot.

8. In the same pan, heat a little olive oil and sauté the extrudate until toasted. Set aside a small portion of the extrudate for garnish.

9. Add the rest of the fried extrudate to the chili and mix well.

10. Season the chili with salt and garnish with the set aside extrudate before serving.



STUFFED PEPPERS

red bell pepper | EntoSus Cricket Mince | onion | garlic | spirulina

Ingredients

1 red bell pepper
1 onion
1 clove of garlic
sunflower oil
20g EntoSus cricket mince
2 dashes Vaxa Icelandic Ultra Spirulina
20g Feta
20g granular cream cheese
1/4 lime
1/4 zucchini
rosemary
Paprika powder (sweet)
basil
salt
pepper

Preparation

1. Dice the onions
2. Chop garlic finely
3. Cut zucchini into half slices
4. Fry onions, garlic and zucchini with the cricket mince in a pan with sunflower oil
5. Add paprika powder, salt and pepper, sauté for about five minutes over medium heat and season to taste
6. Hollow out the peppers
7. Put contents of pan into peppers (feel free to fill beyond the edge of the bell pepper)
8. Spread feta as topping on the bell pepper
9. Bake at 180°C convection oven for about 15 minutes
10. Mix the granular cream cheese with spirulina
11. Mix the granular cream cheese with two drops of spirulina
12. Spread the cream cheese on the peppers
13. Can optionally be finished with a basil and lime

We are Dan-Chi and Dave, and we love culinary kitchens. Conjuring up dishes brings us great joy, especially when we get to savor the results ourselves in the end. Additionally, we enjoy putting a smile on the faces of our friends whom we cook for. We both met during our student days in Bremerhaven, and one of our many shared interests is indulging in various cuisines from different countries and sometimes recreating them. The more unconventional the ingredient combinations, the more enticing the dishes become!

Dan - Chin Tran





MACKEREL ON SPIRULINA POTATO MASH WITH CAULIFLOWER, FRIED CRICKET MINCE AND BLUE FISH STOCK

mackerel | EntoSus Cricket Mince | potato | garlic | cauliflower

Step 1: Potato mash

150g firm boiled potatoes
50g SylPro Yeast
70ml milk
40g butter
one garlic clove
salt
Vaxa Spirulina (1 Flask)
Phycocyanin (1/2 Flask)

Step 2: Fish

2 fresh mackerels
salt
limes

Cauliflower

1/4 cauliflower

Step 3: Sauce / fish stock

mackerel heads, sections and carcasses
70ml pinot gris
70ml water
1 lime
a few leaves of mint
20 grains of black pepper
50g butter
1 clove garlic
1 onion

1. Boil the potatoes, peel them and mash them coarsely. Heat in a pot with the butter. Dissolve SylPro and Spirulina in the milk and slowly stir in. Add the garlic clove pressed. Season with salt and simmer on lowest heat for about 10 min. Finally, add a few drops of phycocyanin to enhance the green color.

2. Cleanly file the mackerel and soak the fillets in plenty of salt and lime. Put the sections in a pot with the wine the water and all the spices and aromatics cold and bring to the water to the boil. The stock should simmer for 20min. Press the stock through a sieve and bring to the boil with the butter. Cut cauliflower into small florets and cook in the stock until about 1/3 of the stock is reduced. Allow stock to cool slightly and color blue with phycocyanin.

3. Fry the cricket mince in butter and oil until crispy and leave to cool on a paper towel.

4. Rinse the mackerel fillets, dry them on the flesh side and fry them in butter and oil for 3/4 of the way through, then turn them over to the skin side for 20 seconds just before serving.

5. Arrange on a (preferably white) platter and pour the blue stock around the mash.

Aaron Cordes

I am Aaron Cordes, 25 years old, I am from Freiburg and I studied „Biotechnology of Marine Resources“ in Bremerhaven. During my studies I worked on aquaculture of algae, fish and molluscs, because I think the production of sustainable protein sources is an enormously important aspect to meet future climate challenges. In my spare time, I am passionate about cooking and like to try out new recipes and products. I was thrilled with the contents of the Koch Box because I think new protein sources not only need to be sustainable, but also taste good.

Starting in September, I will be moving to Portugal for my Master in Aquaculture and I am very excited to deepen my knowledge of sustainable food production from plant and animal sources there.





BRIOCHE BURGER BUNS

rye milk | wheat flour | EntoSus grillen hack | BBQ sauce | mayonnaise with spirulina blue

Ingredients :

Vegan Brioche Burger Buns:

380 ml rye milk
7 g dry yeast
40 g sugar
500 g wheat flour
16 g salt
30 g vegan margarine
Sesame

Crickets mince:

250g EntoSus Grillen Hack
1l apple juice
380ml BBQ sauce
1 teaspoon paprika powder
1 teaspoon chili powder

Topping:

Mix mayonnaise with Vaxa Icelandic Ultra Spirulina Blue
Paprika
Lettuce
Cucumber
BBQ sauce
Balsamic onions

1. Warm the rye milk briefly (!) in a saucepan so that the milk is really only lukewarm (it must not boil). Stir sugar and dry yeast into the lukewarm milk and let stand for 10 minutes.

2. Combine wheat flour and salt. Add milk-yeast mixture and knead for 10 minutes to

form a smooth dough. Meanwhile, fold in the cold margarine. Now cover yeast dough and let it rest in a warm place for 1 hour. The dough should have doubled in any case.

3. Then divide the dough into 10 balls (approx. 100 g each) and form small balls. To do this, flatten the dough ball a bit and fold the edges inward one by one. Now turn the bun over so that the folded side is facing downwards and now turn the bun with both hands so that a great surface tension and a smooth surface is created.

4. Place the finished buns on a baking tray lined with baking paper and let them rest for another 30 minutes.

5. Preheat oven to top and bottom heat 180°C. Brush the buns with rye milk, sprinkle with sesame seeds and bake in the oven for 20 - 30 minutes until golden brown.

Crickets Pattys:

1. Mix 250g EntoSus Grillen Hack with 1 L apple juice and 380 ml BBQ sauce and let marinate overnight.

2. Drain marinated cricket mince, grind marinated mince (e.g. Moulinette 30 - 40 s) and add 5 - 6 tbsp wheat flour or breadcrumbs.

3. Add spices to taste and form patties

4. Brown on high heat and fry through on medium heat

5. Now built your own mini-burger!

The team from the EcoMaterials Institute in the research area of food technology in product and process development at Bremerhaven University of Applied Sciences focuses on sustainable and innovative food and packaging solutions. Participants from left to right in the group picture:

Käthe Wiechmann, Sebastian W. Müller, Daniela Mariño Gonzalez, Lisa Klusmann, Prof. Dr. Ramona Bosse, Insa Mannotte, Alexander Neumann, Marie Heuer.





SEA CHEESECAKE

wholemeal biscuits | butter | cream cheese heavy cream | eggs | sugar

Ingredients

150 g wholemeal biscuits
100 g butter
Baking paper
700 g cream cheese heavy cream
150 g + 1 tbsp sugar
2 tablespoons flour
2 tsp. vanilla salt
1 lemon (zest and juice)
1 sachet vanilla sugar
3 eggs
250 ml cream
200 g crème fraîche
50 g powdered sugar

Preparation

1. Preheat oven to 180 °C (convection oven: 160 °C). Finely crumble 150 g cookies. Melt 100 g butter, mix with the crumbs and press into a springform pan lined with baking paper. Bake on the wire rack on the middle shelf of the oven for 10 minutes. Let cool and in the meantime prepare the pie filling.

2. Increase oven temperature to 220 °C (fan oven: 200 °C). Beat 700 g cream cheese at room temperature with 150 g sugar,

2 tbsp. flour and 2 tsp. vanilla salt with a hand mixer on low speed until creamy. Grate the zest from the lemon, squeeze out the juice. Stir the lemon zest, 1 tsp. lemon juice and vanilla sugar into the cream cheese mixture. Briefly stir in the 3 eggs one after the other. Add 200 ml cream and mix carefully.

3. Grease the edge of the springform pan with a little butter. Pour cream cheese mixture into the form, the surface should be as smooth as possible. Bake in the oven for 10 minutes. Reduce oven temperature to 110 °C (convection oven: 90 °C) and bake cake for another 25 minutes. Turn off the oven and let the cheesecake cool in the oven for 1 hour with the oven door slightly open. The cheesecake may crack slightly on the surface as it cools.

4. 200 g crème fraîche to use, remaining 50 ml cream, 1 tablespoon sugar, 2 teaspoons lemon juice and 1 teaspoon Vaxa Icelandic Ultra Spirulina Blue depending on the intensity of blue mix. Spread on top of the cake up to the edges. Refrigerate cheesecake for at least 5 hours or overnight.





RAVIOLI WITH CREAM FOAM

flour - durum semolina | mushrooms | vegan cream cheese | EntoSus Cricket Mince

Ingredients pasta dough:

- 200 g wheat flour (type 405)
- 180 g durum wheat semolina
- 180 ml cold water
- 1 teaspoon salt
- 1 tablespoon olive oil
- 2-3 knife tips
- *Vaxa Icelandic Ultra Spirulina Green*

Ingredients filling:

- 200 g mushrooms
- 1 onion
- 2 cloves of garlic
- 50 g EntoSus cricket mince
- 200 ml vegetable broth
- 250 g vegan cream cheese
- yeast powder
- parsley
- salt
- Pepper

Ingredients whipped cream:

- 200 ml cold whipping cream or whipped cream
- ½ tsp Masawi Vanilla Salt
- 1 tsp ARBIOM SYLPRO Torula

Step 1: Pasta Dough

1. Dissolve the spirulina powder in the water until all lumps are dissolved.

2. Knead all the ingredients with your hands for about 10 minutes to form a smooth dough. Place the dough ball in an airtight container or wrap in plastic wrap and refrigerate for at least 1 hour.

3. Divide the dough into small portions, flatten slightly and flour. Then roll out into a thin dough using a pasta machine or rolling pin.

Step 2: Filling/Ravioli

1. For the filling, clean the mushrooms and chop finely. Peel the onion and cut into small cubes. Peel and finely chop the garlic as well. Heat the oil in a pan and first sauté the onions until translucent. Then add the mushrooms as well as the garlic and sauté, stirring, over medium heat until the liquid has evaporated. The mixture should cool down before further processing.

2. Coarsely chop the cricket mince with a knife and mix with vegetable broth in a ratio of 1:4. After the mince has been soaked, squeeze it out and fry it in a little oil.

3. Mix the mushrooms/onion mixture in a bowl with the vegan cream cheese and the cricket mince and then season to taste with parsley, yeast powder, salt, pepper and nutmeg.

3. Knead the dough again briefly and then roll out thinly with a pasta machine. Using a glass, cut the dough into circles and fill half of these circles with a teaspoon of the filling. Moisten the edges of these circles with water and close another cut out circle and seal the edges with a fork.

4. Now cook the ravioli in boiling salted water for about 3-4 minutes or until they float to the surface. Then fry the ravioli in a little oil or butter until lightly browned.

Step 3: Cream

1. Mix ingredients together until lump-free, then pour into a cream whipper and refrigerate.

2. Use the cream whisk according to the manufacturer's instructions and pour onto the plate.



PRALINE WITH VANILLA CARAMEL UND MANGO PASSION FRUIT SPIRULINA FILLING

white couverture | cream | butter | mango - passion fruit puree | Vaxa spirulina

Ingredients

600 g white couverture

220 g cream

3 tablespoons sugar

14 g butter

2 tsp. vanilla salt

1 teaspoon Vaxa spirulina powder (very finely ground)

70 g mango-passion fruit puree

Preparation of pralines

1. For the hollow molds, melt approx. 400 g white couverture in a water bath and temper to 30 - 32 °C. Then fill into the hollow molds, tap out air, turn over, wait briefly and turn over again and peel off excess chocolate. Refrigerate to harden.

2. For the salted-caramel filling: caramelize 2-3 tablespoons of sugar in a saucepan, deglaze with about 50 ml of cream and let the caramel dis-

solve. Then add 200 g white couverture, 83 g cream, 7 g butter and 2 teaspoons vanilla salt (more as desired) and melt everything at max. 50 °C until a homogeneous mass is formed. Let the mass cool down to 35 - 28 °C.

3. For the mango-passion fruit spirulina filling: add 200 g white couverture, 83 g cream, 7 g butter, 1 teaspoon spirulina powder (very finely ground) and 70 g mango-passion fruit puree and melt everything at max. 50 °C until a homogeneous mass is formed. Allow filling to cool to 35 - 28 °C.

4. Place the cooled fillings in a piping bag and fill into the hollow praline molds. Let everything cool down. Melt the white couverture and temper to 30 - 32 °C. Use this to seal the chocolates. Seal the pralines with it and allow to set again (preferably overnight) and then remove from the molds.





CAULIFLOWER - POTATO SOUP WITH BAGUETTE

cauliflower | potatoes | butter | nutmeg | Vaxa spirulina

Ingredients soup

garlic
1 onion
1 tablespoon butter
salt, pepper
nutmeg
lemon juice
1 L vegetable broth
1 cauliflower
500 g potatoes
Vaxa Icelandic Ultra Spirulina Blue as needed
200 ml plant-based cooking cream or cream

Ingredients baguette

12-14 g fresh yeast or 2-3 g dry yeast
1 tsp salt
300 ml water
400 g flour

Step 1: Soup

1. Sauté the onions and garlic in butter. Then chop the cauliflower and potatoes and sauté briefly.

2. Deglaze with vegetable broth and simmer for 20 minutes. Finely puree the soup, add the cream and season to taste with salt, pepper, nutmeg and lemon juice.

3. The soup can be eaten hot or colored with Vaxa Icelandic Ultra Spirulina Blue when cold

Step 2: Baguette

1. Mix all the ingredients with a fork or a dough scraper to form a dough, then put it covered in the refrigerator for 12-14 hours or overnight.

2. Preheat the oven to 220°C top and bottom heat.

3. Turn the dough out onto a well-floured work surface and dust with flour. Cut the dough into 3 pieces, stretch it a bit and put it into the troughs of a baguette pan.

4. Bake for about 20 minutes until browned.



STUFFED ZUCCHINI BALL

EntoSus Cricket Mince | soy sauce | carrot | onion | parmesan

Ingredients

50 g EntoSus cricket mince
1 tbsp. soy sauce
1 carrot
1 onion
1 clove garlic
50-100 g grated Parmesan
1 egg
1 tsp. Arbiom yeast extract
½ bunch chopped oregano
Salt and pepper

Preparation

1. Soak the cricket mince in 1 tbsp. soy sauce according to package instructions. Then drain the excess liquid.

2. Peel and finely grate the carrot. Then peel and finely dice the onion. Next, mash the garlic clove with a pinch of salt and sauté the onion and garlic in a pan with a bit of butter. Briefly sauté the carrots and drained cricket mince with them. Remove from the heat.

3. Mix in 50-100 g grated Parmesan, 1 egg, 1 tsp Arbiom yeast extract, and 1/2 bunch of chopped oregano. Season with salt and pepper.

4. For two zucchini balls, cut off the tops, hollow out with a melon baller, and fill with the cricket mince mixture. Bake in the oven at 200 °C for about 30 minutes.

Serve on a yellow tomato-zucchini sauce with braised tomatoes and kohlrabi.

Tip

The cricket mince mixture can also be formed into patties and pan-fried, for example, to make a burger.

Bettina Seitz

Bettina Seitz was born in 1968. In 2006 she went into business for herself with a cooking and grilling school in the South of Germany. Since 2015 she runs her business in the North of Germany in Neumünster (Schleswig Holstein). Bettina Seitz was trained and certified as a meat sommelier, distinguished by the chamber of commerce of Salzburg, Austria, in 2019. In 2022 she had a training as a fish sommelier and was certified by the chamber of industry and commerce Bremen/Bremerhaven, Germany.





CRICKET MINCE FOR WRAPS OR SPRING ROLLS

EntoSus Cricket Mince | rice | carrot | broccoli | Chinese cabbage

Ingredients

100 g rice
1 carrot
1 onion
1 clove garlic
1 red + 1 yellow bell pepper
100 g broccoli
5 leaves Chinese cabbage
Herbal salt
1 tsp. – 1 tbsp. yellow curry paste
250 ml coconut milk
100 ml vegetable broth
1 tsp. fresh ginger
Salt, pepper
1 tsp. Sylpro yeast extract
50 g EntoSus cricket mince

Preparation

1. Cook the rice according to package instructions and peel and cut the carrot into thin strips with a vegetable peeler. Peel and slice the onion into half-rings and mash the garlic with a pinch of salt. Cut both peppers into fine strips and divide the broccoli into small florets. Then slice the Chinese cabbage leaves into strips.

2. Begin by sautéing the onion and garlic in a pan with a bit of oil. Add carrots, broccoli, and bell peppers and season with herb salt. Then, add 1 tsp to 1 tbsp of yellow curry paste and pour in the coconut milk and vegetable broth. Add the freshly grated ginger. Finally, fold in Chinese cabbage and season with salt and pepper.

3. Stir the Arbiom yeast extract with some water and let it sit for 10 minutes. Then soak the cricket mince in 1 tbsp. soy sauce according to package instructions. After about 20 minutes, drain the excess liquid. Sauté the cricket mince in a pan with a bit of oil and deglaze it with the liquid yeast extract. Season with salt and pepper.

4. Roll rice, vegetables, and the cricket mince in two pre-warmed whole wheat wraps and enjoy.

Alternatively, for spring rolls

1. Combine rice, GrillenHack, and vegetables. Mix 1 tbsp of Arbiom yeast extract with about 200 ml of water and place it in a shallow bowl. Dip 4 rice paper sheets, one at a time, into the mixture to soften. Spread the mixture on the rice paper sheets and seal them. Then pan-fry the spring rolls in hot oil until golden brown on all sides.

Serve with a Spirulina Dip

Mix 200 g of sour cream with green spirulina powder (about 1-2 g) and herbal salt and pepper.

POTATO CHIPS WITH SPIRULINA DIP

mayonnaise | potatoes | crème fraîche | salt | Vaxa spirulina blue

Ingredients

3 potatoes
Cinnamon blossom chocolate salt

For the dip

2 *tbsp. mayonnaise*
4 *tbsp. crème fraîche*
Vaxa spirulina blue

Preparation

1. Peel the potatoes and finely slice them.
2. Then, add some oil to a pan and fry the potatoes until crispy on both sides.
3. Season with finely ground cinnamon blossom chocolate salt.
4. For the dip, mix the mayonnaise and crème fraîche together and color it with a few drops of blue spirulina.
5. Adjust the dip's taste if needed with a bit of the salt mixture.



PESTO SPIRULINA

basil | garlic | sea salt | cashew nuts | parmesan cheese

Ingredients

1 bunch basil
1 clove garlic
¼ tsp. coarse sea salt
2 tbsp. roasted, salted cashew nuts
100 - 200 ml olive oil
1 - 2 tbsp. finely grated parmesan cheese
1 pinch of a knife Vaxa spirulina powder

Preparation

1. Pick the basil leaves and finely grind them in a mortar with the garlic, sea salt and cashews.
2. Then season with the olive oil and Parmesan cheese and bring to the desired consistency.
3. Finally, fold in the spirulina powder and serve the pesto with pasta or tomato mozzarella.





SALAD TACOS

EntoSus Cricket Mince | avocado | tomatoes | cucumber | lime

Ingredients

Mince

80g EntoSus cricket mince
1 clove of garlic
Cinnamon blossom chocolate salt
2 tablespoons olive oil
Salad
1 avocado
½ yellow bell pepper
3 tomatoes
2 spring onions
½ cucumber
A few leaves of parsley
juice of ½ lime
Salt

Green sauce

150g cream yogurt
Some food coloring green
Grated juice of 3 limes
Salt
A pinch of Arbiom Sylpro Yeast

Red sauce

4 grilled peppers (from the jar)
2 spring onions (only the white part)
½ bunch of parsley
4 tablespoons olive oil
1 tablespoon red wine vinegar (or white balsamic vinegar)
salt
chili powder (to taste)
Garlic powder

To serve

2-3 crisp romaine lettuce leaves per person

Preparation

1. Soak the cricket mince in water.
2. For the salad, dice all the ingredients very finely and season with salt and lime juice.
3. For the green sauce, mix the ingredients and pour into a bottle.
4. For the red sauce, blend all ingredients in a tall container, pouring in the oil last. Pour into a bottle.
5. Drain the cricket mince in a sieve and dry thoroughly. In a non-stick frying pan, heat the olive oil and fry until crisp. Rub the garlic clove into the pan and season the mince vigorously with the seasoning salt.
6. To serve, place the lettuce leaves on a plate, fill with poop and lettuce and drizzle with the sauces.



LINGUINE AL RAGU

linguine | EntoSus Cricket Mince | mushrooms | carrot | tomato paste

Ingredients

600g linguine
100g EntoSus cricket mince
1 tsp Arbiom Sylpro
1 tsp smoked paprika powder
iodized salt
Black pepper, freshly ground
Sugar
3 tablespoons olive oil
150ml Chianti
20g dried porcini mushrooms
1 stick of celery
1 medium carrot
2 garlic cloves
1 medium onion
1 sprig of rosemary
1 tablespoon tomato paste
1 pinch oregano
A little nutmeg
1 large can of peeled tomatoes (800g)
Parmesan cheese

Preparation

1. Soak the cricket mince in plenty of water, mixing frequently and drain thoroughly in a sieve. Pour boiling water over the porcini mushrooms and leave to soak for a few minutes.

2. Wash, peel and finely dice the vegetables. Finely chop the rosemary.

3. Heat half of the olive oil in a non-stick frying pan and half in a saucepan over medium-high heat.

4. Sauté the cricket mince in the pan, seasoning generously with salt, pepper and paprika. Add a little yeast extract to taste. In the pot, slowly sauté the vegetables.

5. Remove the fried cricket mince from the pan and set aside. Dissolve any drippings with water and add to the sauce later.

6. Add the rosemary to the pot and increase the temperature slightly. Briefly fry the tomato paste, squeeze the mushrooms, chop and add. Deglaze with the red wine, let it boil down, pour the soaking water of the mushrooms through a fine strainer.

7. Coarsely chop the canned tomatoes and add to the pot with the minced meat. Grate nutmeg into the sauce and add oregano. Put the lid on, lower the heat and simmer gently for two hours.

8. At the end of the cooking time, season to taste, adding a little sugar if necessary.

9. Cook the linguine in a large pot in salted water according to package directions, one minute before "al dente" drain a cup of pasta water, drain the pasta and mix with the sauce in the pot. Add a little pasta water and cook in the sauce for two to three minutes.

10. Serve on warmed plates and sprinkle with freshly grated Parmesan cheese, if desired.

Torben Kükern

Torben Küker is 39 years old and currently works as diet chef in a hospital, Kreiskrankenhaus Osterholz





CRICKETS CRAWL UP A TREE

EntoSus Cricket Mince | rice wine of sherry | rice noodles | ginger | garlic

Ingredients

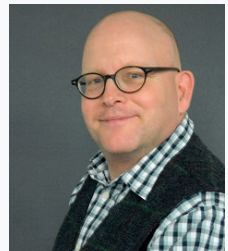
150 g EntoSus cricket grilled minced meat
2-3 tsp dark soy sauce
2 tsp rice wine or sherry (dry)
150 g rice noodles
1 tbsp. wok oil
1 tbsp. ginger, chopped
1 tbsp garlic, chopped
1 bell pepper
2 spring onions, chopped
1 tsp salt
1 tsp chili peppers, finely chopped
1 tsp sugar
1 tbsp sesame oil
350 ml or 1-2 cups coconut milk for soaking the cricket mince

Preparation

1. Mix the grilled minced meat with dark soy sauce, coconut milk, rice wine (sherry) and sesame oil.
2. Soak the glass noodles in hot (!) water for 10 minutes, water, drain.
3. Heat a wok, add oil and heat strongly. Fry the grilled minced meat with garlic and ginger until browned and fragrant.
4. Then put the grilled mince in a bowl and then add the glass noodles, 2 spring onions (white part), ginger, garlic and chillies for 3 minutes; then add the grilled minced meat and mix with the noodles. and mix with the noodles.
5. Finally, sprinkle with the green part of the spring onions and serve hot.

Firmian von Peez

*Born 1969, studied history and
and Sociology at the University of Bremen and
Sinology at Tongji University (Shanghai).
Currently working as DaZ/DaF lecturer and literacy expert in Bremervörde,
Cuxhaven and Bremerhaven etc.
Long-term stays in the People's Republic of China.*





TACOS WITH TERIYAKI-BBQ GROUND MEAT

ground meat | cheddar cheese | green beans | BBQ sauce | onions

Step 1: The Tacos

200 g wheat flour
60 ml water
60 ml oat milk
1 tsp Sylpro yeast protein
1 pinch salt

Step 2: The Filling

4 slices cheddar cheese
300 g ground meat
3 tbsp BBQ sauce
1 tbsp Teriyaki sauce
80 g green beans
2 onions
1 tbsp vanilla salt
3 tbsp sugar

Step 3: The BBQ Sauce

3 tbsp BBQ sauce
1 tbsp Teriyaki sauce

Step 4: The Sweet Lemon Chili Sauce

1 red chili
1 tsp tomato paste
50 ml water
1 tsp cane sugar
Some lemongrass
1/2 lemon (juice)
Salt, pepper

Preparation:

1. First, rehydrate the ground meat according to the package instructions.
2. Next, gently heat 60 ml of water with the Sylpro yeast protein in a pot and whisk until smooth.
3. Then, mix in the remaining ingredients for the tacos and knead with wet hands. Set the dough aside and cover.
4. Prepare the sauces: Mix 3 tbsp of BBQ sauce with 1 tbsp of Teriyaki sauce. For the second sauce, combine all the specified ingredients in a tall container and blend with an immersion blender. If the consistency is too thick, add another tablespoon of water. Season with salt, pepper, and lemongrass.
5. For the caramelized onions, slice the onions and sauté them in hot oil. Add the sugar and vanilla salt and let them caramelize. Then, transfer them and let them cool.
6. Blanch the green beans in salted water, then rinse with cold water.
7. Roll out the taco dough into small discs on a floured work surface.
8. Strain the ground meat, then sauté it until it lightly changes color. Remove from heat and mix with 3 tbsp of BBQ sauce and 1 tbsp of Teriyaki sauce.
9. Cook the tacos for about 1 minute on each side. After flipping, top them with cheese and then with the warm ground meat.
10. Now, assemble the tacos with the caramelized onions and green beans. Add a bit of each sauce according to your taste and enjoy while still warm.

Arthur Schäfer

I am Arthur Schäfer, a trained chef and now café operator of Cakes & Bowls. Before the café, I created recipes as a food blogger with the name Foodartbremerhaven, paired with food photography. Due to the growing success, I finally decided to open my own café, which I have been running since November 2021 in Bremerhaven. I also focus on sustainability, freshness and creativity.





MAGIC SPIRULINA PROTEIN ICE CREAM WITH VANILLA SALT

vanilla protein powder | almond milk | Vaxa spirulina | acacia fiber | Stevia

Ingredients

30 g vanilla protein powder vegan
10 g guar gum
600 g - 700 g ice cubes
100 ml almond milk
80 ml water
3 g vanilla salt (secret ingredient)
1g Vaxa Spirulina solution blue for coloring
10 g acacia fiber
10 g inulin
n.b. Stevia

Ingredients Topping:

10 g protein corn flakes
1 Mini-Knoppers
1 bar of children's chocolate
n.B. "Chocolate" flavor powder

Preparation

1. Put the ingredients of the ice cream mixture into the blender
2. Blend on full power for approx. 5 - 8 minutes (Caution! Use only powerful blenders, otherwise you risk overheating. I recommend pausing the blending process for 30 seconds after each minute)
3. Pour finished ice cream mixture into a bowl (preferably with a spatula)
4. Chop children's chocolate and knoppers as well as cornflakes with a knife
5. Top on the ice cream, additionally sprinkle with flavoring powder as needed.

Nutritional values with toppings: 331 kcal, 30 g protein, 22 g carbohydrates, 13 g fat

Jonathan Linke

My name is Jonathan Linke. I studied food technology at the University of Applied Sciences in Bremerhaven, Germany, and my great passion for food and its production brought me to this. I have a burning interest in innovations in the food industry that address the problems of our current and future society. So the NextGenProteins cooking box promotion was a great opportunity to showcase my skills as an ambitious amateur cook, which I have become due to my conscious and sporty diet. I hope that research into alternative proteins will continue and that I will also be able to contribute to this in the future through my qualifications.





UMAMI LOVER SHIRATAKI CURRY WITH CRICKET MINCE AND YEAST EXTRACT

broccoli | princess beans | tomatoes | rice | EntoSus Cricket Mince

Ingredients

150 g broccoli (frozen)
150 g princess beans (frozen)
200 g chopped tomatoes
200 g Shirataki rice
30 g EntoSus crickets mince
1 clove of garlic
10 g peanut butter
½ tsp cumin
1 tsp miso paste
2 tbsp soy sauce
3 tsp curry powder
1 tsp turmeric powder
1 tsp ginger powder (or 5 g fresh ginger)
½ tsp pepper
2 tsp ARBIOM SYLPRO yeast extract
2 tsp vegetable broth
1 tsp. guar gum for thickening
3 tbsp. sugar or stevia, for example
n.b. oil for frying
salt to taste
parsley to garnish

Preparation

1. Mix approx. 120 ml water with 1 tsp. vegetable broth and 1 tsp. yeast extract and soak the grilled mince in it
2. Put the string beans and broccoli with water in a pot or wok. Add 1 tsp vegetable broth and bring to a boil
3. Drain the remaining water from the cricket mince (water can also be added to the vegetables)
4. Fry the cricket mince in a pan with a little oil until it gets a light browning
5. Press or chop the garlic clove and add to the boiling vegetables
6. Drain the Shirataki rice
7. Add chopped tomatoes, spices, sugar (or some stevia), peanut butter, miso paste, soy sauce and shirataki rice to the boiling vegetables and simmer everything for a few more minutes, season with salt
8. Now thicken the vegetable curry with some guar gum and let it simmer for a short time
9. Serve the curry and sprinkle with the grilled mince, garnish with chopped parsley if desired.

Nutritional values

341 kcal, 36 g protein
19 g carbohydrates
9 g fat



CRICKET MINCE CURRY CHIPS A LA PEEZ

potatoes | EntoSus Cricket Mince | sesame oil | curry paste | coconut milk oil

For the oven the potatoes

6 pcs potatoes (or potato wedges from the local supermarket)

1 tsp salt

2 tbsp oil

For the cricket mince in the pan

3 handfuls of EntoSus cricket mince

2 tbsp sesame oil

2 tbsp curry paste from Asia Shop (contains coriander, ginger, garlic etc.)

150 ml coconut milk oil

1 coarsely chopped bell pepper

Preparation of the potato chips in the oven (30 minutes).

1. Preheat the oven to 180 degrees convection.

2. Peel the potato and cut into thin slices. Place on a baking tray lined with baking paper.

3. Drizzle with oil.

4. With supermarket potato wedges, there is no need to add oil as well as the salt. Bake in the oven for 30 minutes.

Preparation of the cricket mince in the pan (10 minutes) and then the remaining 20 minutes in the oven with the chips

1. Fry the cricket mince in sesame oil at level 10 until hot. This creates delicious roasted flavors

2. While frying, slowly stir in coconut milk oil - so that it is completely absorbed by the cricket mince.

3. Stir in 2 generous tablespoons of curry paste from the Asia Shop (contains coriander, ginger, garlic, etc.). This should take 10 minutes.

4. Place the cricket mince in the oven with the chips for the remaining 20 min.

5. Place sliced peppers on top.

6. Let sizzle in the oven for the remaining 20 minutes and then serve. Voilà and best enjoy with a fine Chateau Pez.

Alexander von Peez

I am a commercial employee who has lived in Dublin for more than 20 years. Born in 1969.

Cooking I find very enlightening, it reveals a lot about the culture & history of a country. I came up with this recipe because it seemed the least difficult. Grasshoppers are not necessarily a main ingredient in German or Irish cuisine. The potato, on the other hand, is very popular in Ireland - my adopted country - and in Germany. I have also chosen it as one of the main ingredients. I did a lot of things purely intuitively. Me & my family in Bremerhaven apparently liked it...





„WHAT THE HECK?“ A CREATIVE TWIST ON CAKE

MICROWAVE NUT- & „HACK“ CAKE

flour | ground hazelnuts | Vaxa spirulina | cinnamon | sugar

Dry mix

15 g flour
15 g ground hazelnuts
1/4 tsp (measure) baking powder / Vaxa spirulina dye

1. Soak 5 g mince in 45 ml milk and ground cinnamon flower.
2. Mix dry mixture with 7.5 g vegetable oil and the milk from soaking and some tonka bean paste with whisk in jar or cup, mix in mince with spoon.
3. Bake in microwave for 1 minute, decorate and enjoy slightly warm!

The “hack” (minced meat) was soaked in milk instead of broth or water. My personal secret ingredient, ground cinnamon blossom, was added to it.

From flour, ground hazelnuts, spirulina powder, baking powder, a touch of raw cane sugar, cooking oil, the milk-soaked “hack” and a hint of tonka bean, a quick microwave mug cake was created.

The texture resulting from the nuts and repurposed “hack” worked surprisingly well! I still need to work on the amount of coloring, so that the decorative carrot can be found on a vibrant green cake meadow in the future.

Thank you for the unexpected experiment... and until the next snackcident with alternative proteins!

Claudia Krines

Claudia Krines, born 1978 in Kulmbach, studied ecotrophology at the Technical University of Munich/Weihenstephan. After 10 years at ttz Bremerhaven in various positions ranging from project management to department management and focusing on molecular gastronomy and creative/interdisciplinary process and product development, she moved to the food industry. At Milchwerke „Mittelbe“ she was responsible for the management of product developments for 6 years and changed from there to the areas of business development, regulatory and quality compliance. Since her studies, Claudia Krines has seen herself as a border crosser between scientific disciplines and combines a wide variety of research areas with her current activities..





CRISPY CRICKET DELIGHT WITH WHOLE PEAS AND POTATO MEDLEY

Ulf Jansen

With a profound passion for hobby cooking, his professional focus lies in optimizing the supply chain, combining precision and creativity. In his role overseeing production planning, demand and supply planning, customer service, and logistics, he ensures seamless operations. Additionally, he shares responsibility for ESG guidelines and reporting (Environment, Social, Governance), leveraging his analytical and strategic skills.

PROJECT PARTNERS



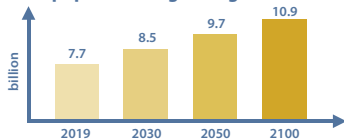
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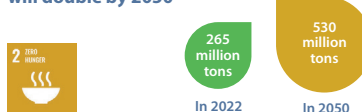
Waitrose

Why do we need alternative proteins?

Global population is growing¹

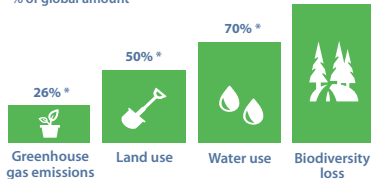


Global demand for proteins will double by 2050^{2,5}

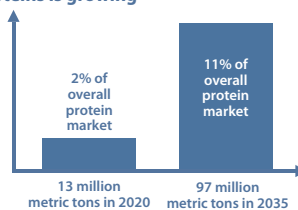


Environmental impact of Food production is high³

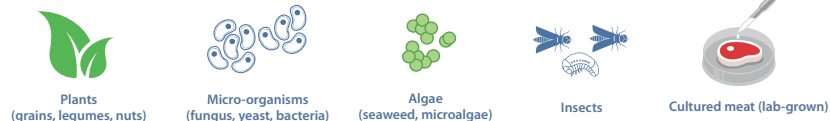
*% of global amount



Global consumption of alternative proteins is growing⁴



What are alternative proteins?



What is most important for the new proteins?



¹ United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019: Highlights (ST/ESA/SER.A/423)

² <https://www.buhlergroup.com/content/buhlergroup/global/en/industries/Extrusion-solutions/Alternative-Proteins.html>

³ <http://ourworldindata.org/environmental-impacts-of-food>

⁴ Morach, Benjamin, et al. "Food for Thought: The Protein Transformation." Industrial Biotechnology 17.3 (2021): 125-133

⁵ <https://www.un.org/sustainabledevelopment/hunger>

What are proteins from microalgae?



Sustainable production¹



No pesticides / no herbicides



Controlled, indoor production in bioreactors



Use natural CO₂ and waste heat from geothermal power plant

*for 1 kg of wet edible microalgae



Reduced use of land*: 0,0378m² (<1% compared to beef²)

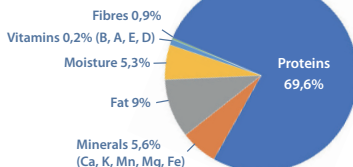


Reduced use of fresh water*: 8,36m³ (<1% compared to beef²)

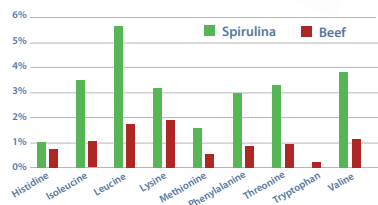


Reduced greenhouse gas emissions*: -0,008 kgCO₂eq CO₂-eq GHG emissions (<1% compared to beef²)

Nutritional value



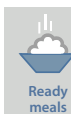
Content of essential amino acids compared to beef² (g/100g)



Regulation Approved in food and feed

How does it taste? Carrot-like, grassy, sweet, not fishy, neutral

Applications tested in the NextGenProteins project



Ready meals



Bakery products



Meat alternative



Food supplements



Poultry feed



Fish feed

2-5% in food

6% in poultry feed

10% in fish feed

Possible Nutrition claims^{3, 4, 6, 7, 8, 9}

1. High phosphorus
2. High iron
3. High manganese
4. High vitamin K
5. Source of B2
6. Source of B3
7. High B12

Possible Health claims^{3, 5, 6, 7, 8}

Magnesium contributes to (1) reduction of tiredness and fatigue, (2) electrolyte balance, (3) energy-yielding metabolism, (4) functioning of nervous system, (5) muscle function, (6) protein synthesis, (7) psychological function, (8) maintenance of bones, (9) maintenance of teeth and (10) has a role in cell division.

Vitamin K contributes to (1) normal blood clotting and (2) maintenance of bones.

Vitamin B12 contributes to (1) energy-yielding metabolism, (2) functioning of nervous system,

(3) homocysteine metabolism, (4) physiological function, (5) red blood cell formation, (6) functioning of immune system, (7) reduction of tiredness and fatigue and (8) has a role in cell division.

Iron contributes to (1) cognitive function, (2) energy-yielding metabolism, (3) formation of red blood cells and haemoglobin, (4) function of immune system, (5) reduction of tiredness and fatigue and

(6) has a role in cell division.

¹ Tzachor, A., Smidt-Jensen, A., Ramel, A., & Geirsdóttir, M. (2022). Environmental impacts of large-scale Spirulina (Arthrospira platensis) production in Hellisheidi geothermal park Iceland: life cycle assessment. *Marine Biotechnology*, 1-11.

² Disclaimers: Beef has been used as a comparison because of high protein content and high consumption around the world. NextGenProteins does not aim to discredit any protein source, but rather to inform about new sources.

³ https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register-home

⁴ https://food.ec.europa.eu/safety/labelling-and-nutrition/nutrition-and-health-claims/nutrition-claims_en

⁵ Regulation (EU) No 432/2012 – List of permitted Health Claims.

⁶ Regulation No 1924/2006 on nutrition and health claims made on foods.

⁷ Regulation (EC) No 1169/2011 on the provision of food information to consumers

⁸ Council Directive 1990, 90/496/EEC on nutrition labelling for foodstuffs.

⁹ Regulation (EC) No 1925/2006 on the addition of vitamins and minerals and on certain other substances to foods

NextGenProteins aims to optimise and validate, in an industrially relevant environment, the production of proteins from microalgae, single cells and insects and demonstrate their suitability as alternative sustainable sources in food and feed value chains.

www.nextgenproteins.eu
#nextgenproteins@matix.is

This Project has received funding from the European Union's Horizon 2020 Research and Innovation programme under grant agreement no. 862704.



What are Single Cell Proteins?



Sustainable production²



Controlled, indoor production in bioreactors



Use carbon from sustainable feedstocks (e.g. branches, saw dust, wood chips and straw)

*for 1 kg single cell proteins



Reduced use of land*: 0,00027m² (0,0003% compared to beef³)

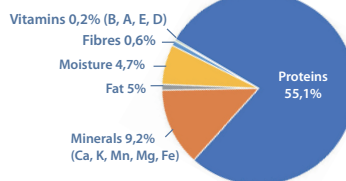


Reduced use of fresh water*: 0,29m³ (3% compared to beef³)

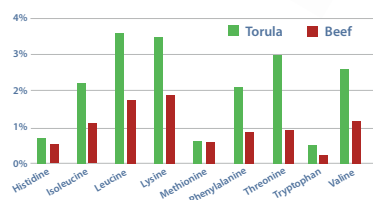


Reduced greenhouse gas emissions*: 12,3kgCO₂e/g (11% compared to beef³)

Nutritional value



Content of essential amino acids compared to beef³ (g/100g)



Regulation Approved in food and feed

How does it taste? Umami/yeasty taste

Applications tested in the NextGenProteins project



Ready meals



Bakery products



Meat alternative



Food supplements



Poultry feed



Fish feed

3-15% in food

2-6% in poultry feed 5-10% in fish feed

Possible Nutrition claims^{4,5,7,8,10,11}

1. Source of vitamin B12

Possible Health claims^{4,6,7,8,10}

Vitamin B12 contributes to normal (1) energy-yielding metabolism, (2) functioning of nervous system, (3) homocysteine metabolism, (4) physiological function; (5) red blood cell formation, (6) functioning of immune system, (7) reduction of tiredness and fatigue and (8) has a role in cell division.

1 N.B. The properties below concern Arbiom's SylPro, not Torula Yeast in general

2 NextGenProteins (2022) Deliverable No 6.3. Report on circular economy potential of alternative proteins available on <https://zenodo.org/communities/nextgenproteins/?page=1&size=20>

3 Disclaimers: Beef has been used as a comparison because of high protein content and high consumption around the world. NextGenProteins does not aim to discredit any protein source, but rather to inform about new sources.

4 https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register_home

5 https://food.ec.europa.eu/safety/labelling-and-nutrition/nutrition-and-health-claims/nutrition-claims_en

6 Regulation (EU) No 432/2012 – List of permitted Health Claims.

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10 Regulation (EC) No 1925/2006 on the addition of vitamins and minerals and on certain other substances to foods

11 Scientific Opinion on Dietary Reference Values for cobalamin (vitamin B12) = EFSA Journal 2015;13(7):4150)

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What are edible insect proteins?



House cricket

Sustainable production¹



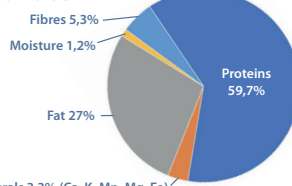
Automated indoor farms



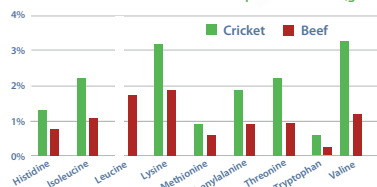
Use plant-based by-products from agriculture (e.g. vegetable peel to feed the insects)

- *for 1 kg insect proteins²
- Reduced use of land*: 0,00006m² (0,0001% compared to beef³)
 - Reduced use of fresh water*: 0,15m³ (2% compared to beef³)
 - Reduced greenhouse gas emissions*: 0,9kgCO₂e/q (1% compared to beef³)

Nutritional value



Content of essential amino acids compared to beef³ (g/100g)



Regulation Approved in food⁴ and feed

How does it taste? Nutty, slightly bitter (dark chocolate)

Applications tested in the NextGenProteins project



5-8% in food

No nutrition or Health claim possible considering the use of 5% cricket in food or drink.
Insects are part of traditional cuisine for 2 billion people around the world.

¹ NextGenProteins (2022) Deliverable No 6.3. Report on circular economy potential of alternative proteins available on <https://zenodo.org/communities/nextgenproteins/page=1&size=20>

² Disclaimer: considering the low amount and quality of data available, the figures presented are not directly comparable with other alternative protein sources studied in NextGenProteins

³ Disclaimers: Beef has been used as a comparison because of high protein content and high consumption around the world. NextGenProteins does not aim to discredit any protein source, but rather to inform about new sources.

⁴ Commission Implementing Regulation (EU) 2023/5 of 3 January 2023 authorising the placing on the market of Acheta domesticus (house cricket) partially defatted powder as a novel food and amending Implementing Regulation (EU) 2017/2470



What are feedable insect proteins?



Black Soldier fly

MUTATEC
Bioconversion by insects

Sustainable production¹



Automated indoor farms



Use plant-based by-products from agriculture (e.g. vegetable peel to feed the insects)



*for 1 kg insect proteins

Reduced use of land*: 0,00074m²
(0,0008% compared to beef ²)

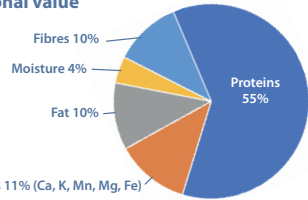


Reduced use of fresh water*: 3,46m³
(38% compared to beef ²)

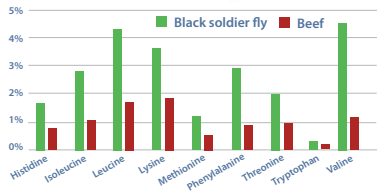


Reduced greenhouse gas emissions*:
10,2kgCO₂e/q
(9% compared to beef ²)

Nutritional value



Content of essential amino acids compared to beef² (g/100g)



Regulation Approved for use in pet food, chicken feed, pork feed and aquafeed

Applications tested in the NextGenProteins project



Feed for turkey



Feed for broiler chicken

9-18% in poultry feed



Feed for Salmon



Feed for Seabream

5-15% in fish feed

¹ NextGenProteins (2022) Deliverable No 6.3. Report on circular economy potential of alternative proteins available on <https://zenodo.org/communities/nextgenproteins/?page=1&size=20>
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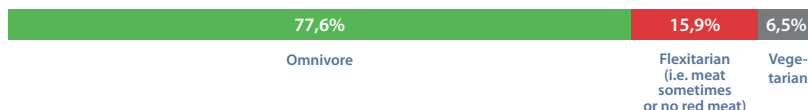
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Do the consumers eat alternative proteins?

Diet of Europeans¹

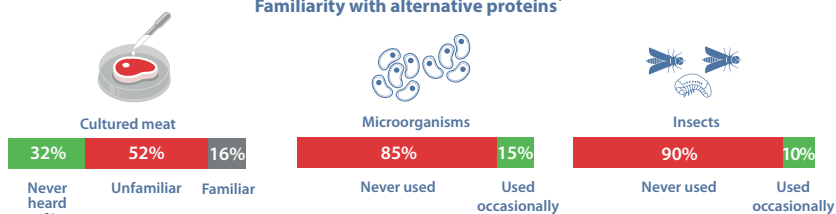
Most important reason for intentionally aiming to reduce meat consumption in EU¹



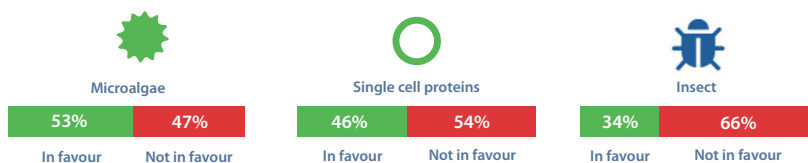
Most important reason for intentionally aiming to reduce meat consumption in EU¹



Familiarity with alternative proteins¹



Are Europeans in favour of the NextGenProteins?¹



¹ Results of an online NextGenProteins survey implemented in Finland, Germany, Iceland, Italy, Poland, Sweden, and UK in May and June 2021 with 6600 respondents in total (without food tasting); NextGenProteins (2022) Deliverable No 5.1. Consumer views about the Next Generation proteins for food in Europe available on <https://zenodo.org/communities/nextgen-proteins/?page=1&size=20>

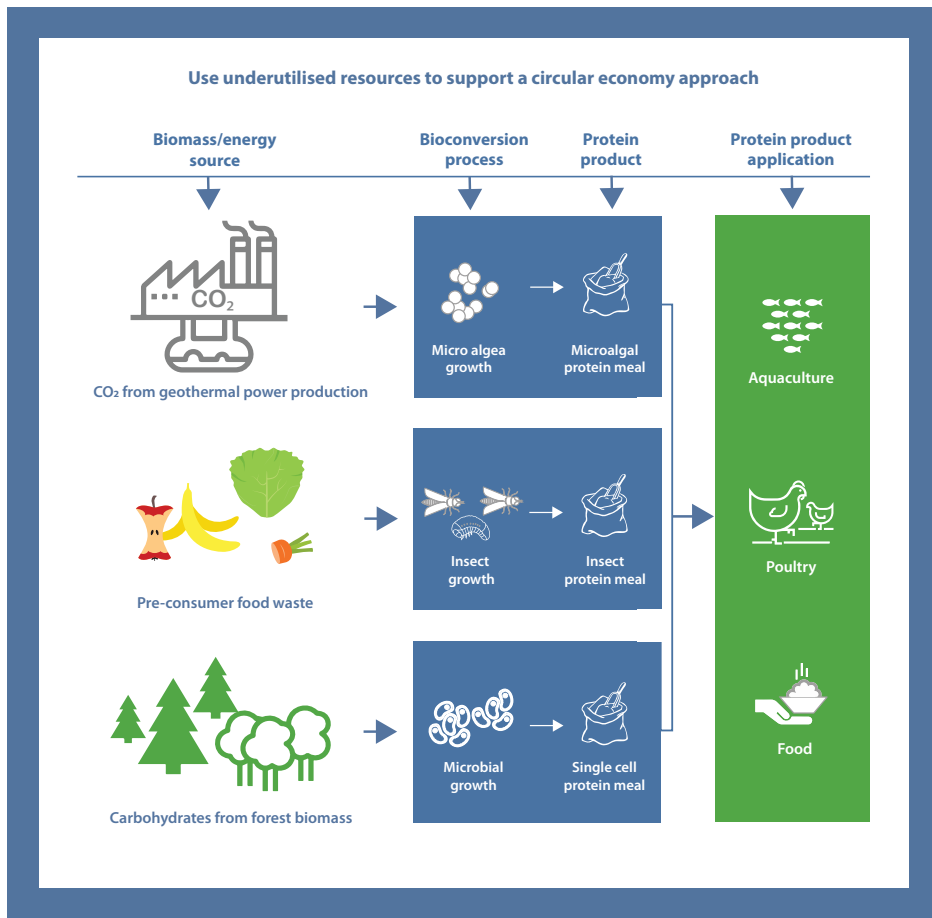
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Why are NextGenProteins sustainable?



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How does NextGenProteins take into account the impact of alternative proteins on environment and society?

Use Responsible Research and Innovation (RRI)^{1,2,3}

RRI is an interactive and mutually responsive process between scientists accountable for research and non-experts able to influence the Research and Innovation process and its outcomes.

Practical Application of RRI principles in NextGenProteins

	Process: How could we approach it differently?	Product: What are we working on?	Purpose: Why are we working on it?	People: Who might be affected in the future?
Anticipate & Analyze 	Theories Methodology	Ethics Regulations Safety IPRs	Protein challenge Climate change	Open access for increased Acceptance Desirability
Reflect & Reason 	Gender balance Risk assessment	People & Animals Welfare Food & Feed Quality	Availability of affordable food Quality of life	Democratic informed choice Income and working conditions
Engage & Include 	Researchers Food industry	Stakeholders & Animals	Society & living environment	Citizens
Act & Respond 	Data security Non-discriminatory practices	Regulation Animal welfare	Unpredictability of innovations Environmental issues Production costs	Cultural and religious barriers Ignorance Discrimination

So, what does RRI bring to me, as a consumer?

Responsible research and Innovation (RRI) ascertain that the researchers develop products adapted to my consumer needs and expectations. I can also expect that the products are developed in a responsible way.

¹ NextGenProteins (2020) Deliverable D7.2 RRI Framework established available https://nextgenproteins.eu/wp-content/uploads/deliverables/Submitted-NextGenProteins_deliverable-7.2-RRI-Framework-final.pdf

² NextGenProteins (2020) RRI Conceptual Framework Matrix available <https://nextgenproteins.eu/wp-content/uploads/deliverables/RRI-Conceptual-Framework-Matrix-Final2.pdf>

³ NextGenProteins Webinar (2020) NextGenProteins RRI Framework available https://nextgenproteins.eu/wp-content/uploads/2021/06/NextGenProteins_RRI_Framework.mp4

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[#nextgenproteins@matiss.is](mailto:nextgenproteins@matiss.is)

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Publisher and Contact

ttz Bremerhaven
- Sensorik & Konsumentenforschung -
Lengstraße 3
27572 Bremerhaven
Germany



Dr. Christina Dietz
Linda Böhm

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Christiane Nau, Andreea Hantulie, Dr. Christina Dietz und Linda Böhm

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NEXTGEN
PROTEINS

NextGen Proteins

12, Vínlandsleið
113, Reykjavík
Iceland
nextgenproteins@matis.is



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#alternativeproteins



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