



Let's investigate what makes the
Okinawan diet so healthy

**NEW
BRAIN
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In a previous blog, I wrote about the benefits of the “[Okinawan Diet](#)” and this is a summation of the most important facts for you. Just as the “Mediterranean Diet”, the Okinawan one is said to be beneficial for your physical and mental health, contributing to a long and healthy life.

- They have a low caloric intake. Okinawans follow the rule “hara hachi bu” which very loosely translates to “only fill up to 80%” (“Hara” is Japanese for the area of the soft belly.).
- Their diet is rich in root vegetables, especially the very healthy sweet potato (Who would have guessed that a vegetable carrying the term “sweet” could be more beneficial for your health than its common counterpart?). Sweet potatoes have a high content of dietary fibers, antioxidant vitamins A, C and E and anti-inflammatory properties.
- They eat many legumes, such as soybeans. Legumes are rich in dietary fibers - among others - which can contribute to lower cholesterol levels, lower risk of coronary heart disease and a smooth digestion (2).
- An abundance of mostly green and yellow vegetables is eaten regularly.
- Okinawans don't abstain from meat, alcohol or tea. They consume it in moderation, however. Jasmine tea is the beverage of choice on Okinawa, while a kind of sake (rice wine) is consumed on social occasions.
- When meat is eaten, they mostly choose lean pork. Seafood is also eaten in moderation. It seems like no food should be strictly avoided, but that it's more like the phrase: “Eat everything in moderation and not in abundance.”



- Different fruit and medicinal plants (like curcumin or bitter melon) further contribute to a healthy and diverse cuisine. The Okinawan saying “Nuchi Gusui” states that “food is medicine”, meaning that many food items have such beneficial properties that there is no need for a strict distinction between food and medicine.
- Dairy products are rarely eaten.
- Altogether, Okinawan food is high in unrefined carbohydrates (refined carbohydrates occur e.g. in sweets or white bread, unrefined carbohydrates occur e.g. in brown rice or wholemeal bread) and they consume protein in moderate amounts and mostly plant based (from legumes, vegetables, but also occasionally from fish or meat). Unrefined carbohydrates have a low Glycemic Index (GI) which means that they are more slowly digested and metabolized than refined ones. As a result, blood glucose levels and thereafter insulin levels rise lower and slower in comparison to the consumption of high-GI food.

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- The Okinawan diet is characterized by a healthy fat profile: rich in omega-3 fatty acids (which occur in fatty fish like salmon, but also in seeds, like flaxseeds, and nuts), high in other polyunsaturated and monounsaturated fatty acids (occurring e.g. in olive oil or avocado, and low in saturated fats (e.g. occurring in butter). Saturated fats contribute to the overall energy intake by less than 10%. Altogether, the general consumption of fat is low.
- Hence, its composition resembles that of the mediterranean diet, which also is associated with a lower risk of cardiovascular disease and other age- and lifestyle-related diseases ([download your free report on the current state of research on the mediterranean diet here](#))
- Given all the advantages, the Okinawan Diet has one crucial downside, though: It is high in sodium, especially because of the ubiquitous soy sauce and miso, but also because of pickled vegetables or salty fish. This might work out well in hot and humid areas where people sweat more, but not so much in most European or North American areas. High sodium intake is a risk factor for developing hypertension, so sodium should be reduced whenever possible - the World Health Organisation recommends less than 5g of salt (2g sodium) per day (3).



By changing our diet and adapt it to the Okinawan (or mediterranean) diet, you could contribute to a long and healthy life. Now you might ask how this relates to “new brain nutrition”? Well, a healthy diet affects our gut, which is linked closer to our brain than we originally have assumed ([learn more here](#)).

Hence, diet should have an impact on our brain health just as on our general health. Substances from fermented soy beans (so-called natto) , for example, are said to have the potential to prevent the formation of plaques in the brain, which is related to Alzheimer's disease. Also, anti-inflammatory effects of a high polyunsaturated fatty acid consumption might have an effect on the production of neurotransmitters (essential for the transfer of information between nerve cells), which largely takes place in the gut. Interestingly, due to a more western-style cuisine, the younger Okinawans are starting to face the same diseases such as diabetes, high blood pressure, etc, just as people from the rest of the world. Diet matters!

So: What changes in your diet do **you** want to start with?

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Take the first step and try a typical Okinawan dish:

Goya Champuru

- 1 Goya cucumber, also called bitter melon (may also be frozen), which you can find at asian supermarkets
- 1 block tofu, dried and as firm as possible
- Approx. 80-100g Shabu-Shabu meat (thinly sliced pork); cut meat into bite-sized pieces
- 1-2 tablespoons soy sauce
- 1-2 tablespoons rice wine (sake)
- 1/2 teaspoon salt
- 2 tablespoons neutral oil (must be suitable for frying!)
- 2 eggs
- For vegetarians: Follow the same recipe, but replace Shabu-Shabu with chopped vegetables like carrots, onions, cabbage and bean sprouts or pumpkin.

Wash the Goya cucumber, cut it in half and remove the seeds with a spoon. Slice thinly, salt it, let it rest for a few minutes. Wash again, press firmly to remove as much water as possible.

Stir-fry the Shabu-Shabu in a tablespoon of oil, salt it afterwards. Add tofu and stir-fry it until it turns slightly dark. Put tofu and Shabu-Shabu aside.



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References:

1. Willcox DC; Scapagnini G; Willcox BJ. (2014) Healthy aging diets other than the Mediterranean: a focus on the Okinawan diet. Mech Ageing Dev.; 136-137:148-62 (ISSN: 1872-6216); [found here](#)
2. <https://de.wikipedia.org/wiki/Ballaststoff>
3. World Health Organization (2012) Sodium intake for adults and children; [found here](#)

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