

Towards environmentally sustainable and healthy diets in Switzerland: uncovering food prescriptions, practices and impacts

By Marlyne Sahakian, Alexi Ernstoff and Laurence Godin

Nourishment is as much cultural as it is biological: we eat for sustenance and survival, but what and how we eat is also tied up with culture and tradition, and is an important part of our social relations. Swiss people today are questioning what they eat, with increasing concerns around human, community, and planetary health.



1. What are the dominant “healthy and sustainable” food prescriptions in Switzerland?

There is no one definition of what a “healthy and sustainable” diet is. To better understand how people integrate health and sustainability in their everyday food habits, we analysed food prescriptions in Switzerland – or indications and guidelines suggesting what we should eat. We then related these to social practices around food provisioning, preparation and eating, shedding light on what people actually do in regards to food consumption.

Prescriptions can inform people’s practices, but they can also be ignored. Just because people know about the Swiss food pyramid does not mean they follow its guidelines¹. The importance people give to prescriptions depends on different factors, such as whether you are eating at home or eating out, who is cooking for whom, and on what occasion.

1. Swiss food pyramid, by the Swiss Nutritional Society: http://www.sge-ssn.ch/media/sge_pyramid_E_basic_20161.pdf

Prescriptions can be communicated through various channels, including nutritional brochures made by public authorities, campaigns and advertisements, curriculum in classrooms, or even recommendations shared through social media. We considered a range of sources, from interviews to a media analysis, to identify seven dominant food prescriptions around “healthy and sustainable” diets in Switzerland².

2. Godin, L. and M. Sahakian (2018). Cutting through conflicting prescriptions: how guidelines inform “healthy & sustainable” diets in Switzerland. *Appetite* 130: 123-133.

- Most prescriptions are about human health; there are fewer prescriptions that relate to environmental sustainability.
- Most Swiss people identify with the need to eat “a balanced diet”, which usually refers to the Swiss food pyramid.
- In addition to a balanced diet, “eating as pleasure and conviviality” is another dominant prescription.
- Prescriptions relating to “natural and organic” diets, as well as “local and seasonal” diets, often overlap.
- Increasingly, the “local” is used as a proxy for sustainable and healthy food, usually understood as limiting the distance from farm to fork.
- Eating “less and better meat” often comes in opposition to “vegetarian and vegan” diets; for some, eating less meat is part of a process, towards vegetarian diets; for others, any consumption of animal-based products is seen as fundamentally wrong.
- “Slimming diets” are sometimes seen as healthy diets, and have the potential to not be aligned with “eating as pleasure”.

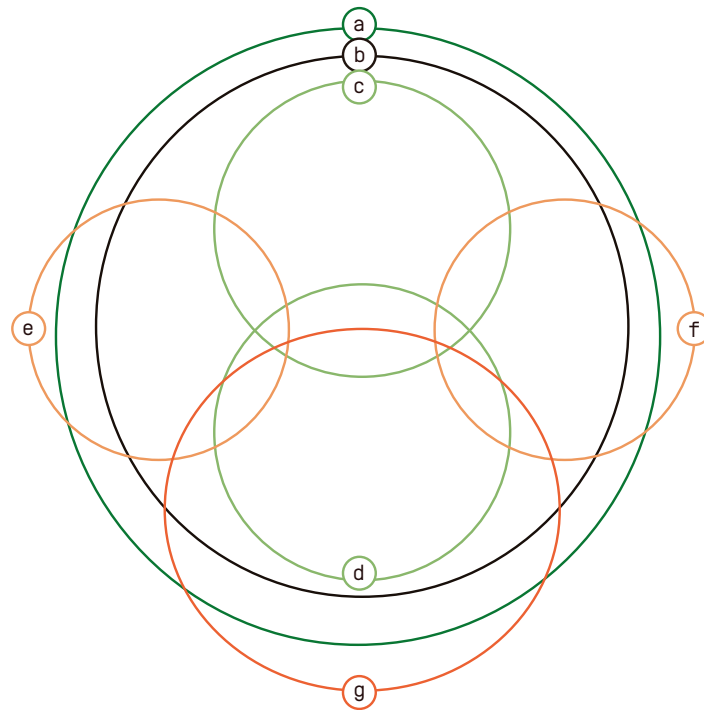
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Dominant prescriptions, or guidelines which inform what people should or ought to eat, around “healthy and sustainable” diets in Switzerland.

Source: Godin and Sahakian 2018.



- Ⓐ Eating as a pleasure, conviviality
- Ⓑ Balanced diet (Swiss food pyramid)
- Ⓒ Natural and organic diets
- Ⓓ Local and seasonal diets
- Ⓔ Less of better meat consumption
- Ⓕ Vegetarian and vegan diets
- Ⓖ Slimming diets

2. What aspects of everyday life are important for food consumption?

Unlike prescriptions, social practices involve not only what people say but also what they do. Eating a meal relates directly to several practices, like shopping for food, storing products, or handling waste. Through interviews and focus groups, we found the following elements to be significant in relation to food consumption practices:

Mobility and transit: the rhythms of everyday life are an important consideration when it comes to food provisioning. Food access is related to people’s transits, from work to home for example. People can also eat or plan meals while in transit, especially in public transportation systems or on highways. Transportation hubs, such as train stations or key intersections, are important spaces for food consumption, in terms of both shopping and eating.

Time management and life-stages: in Switzerland, time availability is more important than the price of food – at least among households living with relative financial ease. When on a quest for time savings, convenience (and sometimes processed) meals represent important short cuts for people. Life events, such as moving households or having a child, can also have an influence on what people eat.

Social dynamics in and outside the home: who is doing the cooking, how many people are eating, and more generally social relationships also influence planning, preparing and consuming meals. As women are responsible for many domestic chores in Switzerland, including planning and cooking meals, as well as feeding children, promoting “healthy and sustainable” diets should not create even more work for them.³

Demonstrating new practices: eating in canteens, restaurants, and other places with a group of peers, including colleagues, friends, or family members, can encourage people to try out new prescriptions, like vegetarian diets, and can also represent opportunities for learning about new foods, diets, or recipes.

3. Swiss Federal Statistical Office (2017b). Les familles en Suisse. Rapport statistique 2017, Neuchâtel, Confédération suisse.

3. Are Swiss diets healthy and sustainable?

Sustainability is a broad term that encompasses various environmental, social, and economic dimensions. In addition to understanding prescriptions and practices related to food consumption, in this study we looked at the greenhouse gas emissions and associable disease risks as only two indicators of “health and sustainability”.

To relate current Swiss diets to health and environmental impacts, we used data from the first large-scale Swiss dietary survey, MenuCH, along with studies regarding disease risk related to diet.⁴

The Swiss are generally eating healthier than in many other countries in the world. Nevertheless, significant improvements can be made.

Eating too much processed meat and sodium, drinking too much alcohol, and not eating enough whole grains are the most important dietary contributors to health damage in Switzerland. Following these issues, low nuts and seeds, vegetables and fruits are also important. Cereal products such as breads, biscuits, pastas, and rice dishes are the primary source of sodium in the Swiss diet, followed by processed meats, cheeses, and sauces.

4. Afshin et al. “Health Effects of Dietary Risks in 195 Countries, 1990–2017: A Systematic Analysis for the Global Burden of Disease Study 2017.” *The Lancet* 393, no. 10184 (May 11, 2019): 1958–72. [https://doi.org/10.1016/S0140-6736\(19\)30041-8](https://doi.org/10.1016/S0140-6736(19)30041-8).

How to improve healthy Swiss food consumption



whole grains
nuts and seeds
vegetables
fruits
legumes

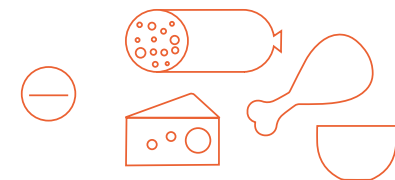


processed meat
alcohol
sodium
(including sodium in breads, biscuits, pastas, and rice dishes)

How to improve the environmental performance of Swiss food consumption



whole grains
nuts and seeds
legumes (local)
seasonal vegetables
seasonal fruits
tap water



animal products
(including dairy)
non-tap-water beverages
(such as coffee)

4. Are “local” foods the solution towards sustainable and healthy Swiss diets?

Swiss people identify strongly with eating locally as being more sustainable, and such practices can have various advantages, such as supporting local economies. However, what is “local” is not always well-defined and may not always be environmentally sound. For example, fruits and vegetables grown locally in the winter season require a significant amount of fossil energy for heating and lighting greenhouses.

Environmental impacts (specifically the carbon footprint) of Swiss diets are linked to the high consumption of animal products, which can also be local. Although the Swiss standards for animal welfare and other measures tend to be higher than in many other countries, animal products, specifically beef and dairy, are still major contributors to greenhouse gas emissions. In cases where Swiss livestock consumes imported feed, then local animal products may also be contributing to deforestation, biodiversity loss, and carbon dioxide emissions from soil exploitation in other countries.

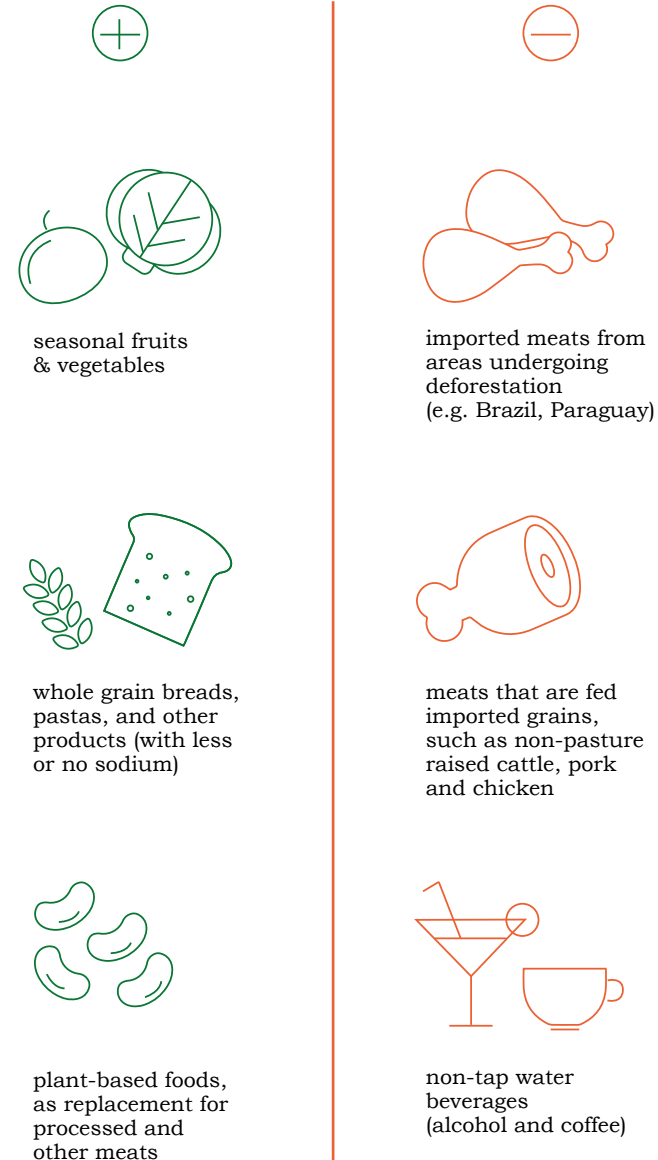
When consuming “local” food, from Switzerland and neighbouring countries, and towards lowering greenhouse gas emissions, seasonal fruits and vegetables should be prioritised, along with less animal products in general; and for animal-based products, animals nourished with feed from Switzerland, such as pasture-raised cattle, should be privileged. Also considering the relative high amount of fresh water in Switzerland, water intensive crops like legumes can be more sustainable when grown locally than when grown abroad - especially in regions with water stress or undergoing deforestation.

5. What if we looked at food provisioning systems, rather than consumer diets?

When comparing diets, and in line with other recent dietary studies, we found that low meat eaters (e.g. vegetarians) have the lowest associated carbon footprint. However, even vegetarian and vegan diets exceed an acceptable per person per year carbon budget for Swiss diets (generally understood as 1-2 tonnes of carbon dioxide per person per year).⁵ In addition to dietary transitions to reduce animal product consumption, other major changes are also needed in relation to food systems. For example, fossil fuel use should be eliminated from production processes, and nitrogen fertiliser management could be improved.

5. Chakravarty et al. “Sharing Global CO2 Emission Reductions among One Billion High Emitters.” Proceedings of the National Academy of Sciences 106, no. 29 (July 21, 2009): 11884–88. <https://doi.org/10.1073/pnas.0905232106>.

To improve health and environmental impacts associated with Swiss diets, systems of food provisioning could promote:



6. The following action items for promoting healthy and sustainable diets in Switzerland:

Establish a Swiss food policy forum: food systems are complex and merit a forum where their different dimensions can be tackled in earnest, working across sectors and areas of expertise (e.g., agriculture, mobility, urban planning, health and safety, trading, sourcing etc.).

Make practices, rather than individual people, the aim of policies: food consumption needs to be embedded in the complex interactions that make up everyday life. More attention could be placed on food practice settings and the interrelations between practices, such as the significance of mobility and transit, or eating out as a demonstration site for new diets.

Move from consumption practices to systems of provision: rather than over-responsibilising individuals towards healthy and sustainable diets, and recognize the role of systems of food provisioning in promoting healthy and sustainable diets. More attention could be placed on imports, and the types of foods that are promoted in stores and by the food service sector.

Emphasize what people should eat instead of what they should avoid: rather than focus on reducing “unhealthy and unsustainable” products, encourage the increased consumption of healthy and low environmental impact foods into everyday diets. The priority items are whole grains (e.g., whole-grain bread), nuts and seeds, vegetables, fruits and legumes.

Project partners: University of Lausanne (Suren Erkman), University of Geneva (Marlyne Sahakian and Laurence Godin); EPFL (Claudia Binder, Ivo Baur and Stefanie Krauth), Quantis (Arnaud Dauriat, Alexi Ernstoff), University of Michigan (Olivier Jolliet).