



Seaweed as health and dietetic food

What target consumers?

Idealg project

Context

Macro-algae have been part of the human diet from time immemorial and have long been used in Chinese, Japanese and Indian medical schools for their **medicinal properties**. In France, consuming seaweed as food is a relatively recent and minority practice. Consumption started in the 1970s, spurred on by **vegetarians** interested in its nutritional properties, and then attracted a larger consumer base in the 2000s with the development of Japanese restaurants and the success of sushi.

Methodology and work focus

The surveys conducted by AGROCAMPUS OUEST as part of the Idealg project identified consumers interested in seaweed as a health food because of its nutritional and dietetic properties, work that resulted in the authors asking the following question: "**Is edible seaweed a health food product and is it suited to French eating habits?**"

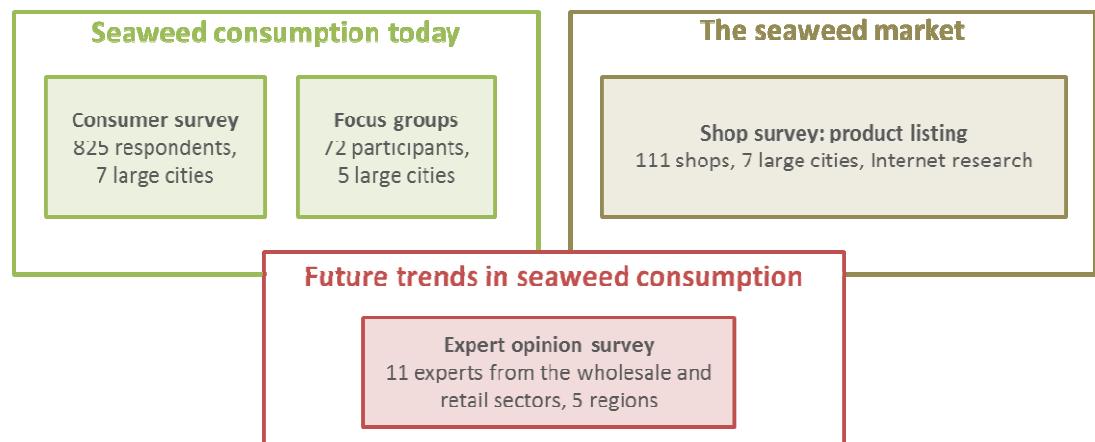


Diagram summing up the methods used

Health is one of the main perceived attributes of edible seaweed in France. French consumers associate it with seafood as well as with a number of nutritional, dietetic and health benefits. When asked about the profile of seaweed consumers, both general public respondents and experts imagine a **woman** looking for natural, healthy and low-calorie products to help her **eat better** and **watch her figure**. This profile is indeed a historical one in edible seaweed consumption; many French women, however, have never had access to such products and are therefore a potential target.

Besides, despite the obvious link between edible seaweed and health, few processors and retailers are marketing seaweed as a health product in an appropriate selling environment. Only **organic shops** highlight this aspect. The panel of experts also confirmed how **difficult it is for them to place seaweed** in a specific product category.

What consumers?

The results of the surveys show that the nutritional and/or dietetic properties of seaweed appeal to two consumer profiles: **consumers of both health and dietetic food** and **consumers of health food only**.

	Consumers of health and dietetic food	Consumers of health food only
Target profile	<ul style="list-style-type: none">Gender: femaleAge: 55 and over	<ul style="list-style-type: none">Gender: male and femaleAge: 45 to 64
	<ul style="list-style-type: none">Marital status: single, living as a couple, as a familySocio-professional category: actively employed or retiredCook 4 to 6 times a week	

On the one hand, consumers of both health and dietetic food account for around 20% of the population interviewed as part of the Idealg project. These are **mainly older, retired women**. Although these people want to eat a **balanced diet** made up of natural and healthy products, most of them are post-menopausal and also look for food that will help them **control their weight**. On the other hand, almost one third of the respondents are consumers of health food only. These are **men and women**, aged 45 to 64, in active **employment**.

More than half of the people in these two main target consumer profiles **do not eat seaweed**. Although organoleptic properties are important for a majority of non-seaweed consumers, they do not appear to be a limiting factor when it comes to consuming seaweed-based products.

What seaweed-based products?

Health food is food with a **health and/or nutritional claim** about which a brand communicates. Dietetic food addresses **specific groups** of the population, like young children, sportspeople or people on a slimming diet. Edible seaweed is both a health and dietetic food product because it is both high in **soluble dietary fibres, vitamins, minerals and proteins** and low in fat and carbohydrates.

	Consumers of health and dietetic food	Consumers of health food only
Seaweed products matching the profile	<ul style="list-style-type: none">Minimally processed food: raw products (mainly dried seaweed), tartars and condimentsProcessed food: breads, garnishes, soups, cans	<ul style="list-style-type: none">Minimally processed food: raw products (dried, fresh or brined seaweed), tartars and condimentsProcessed food: breads, rillettes, garnishes, soups, cans
Preferred distribution channels		<ul style="list-style-type: none">Organic shopsSuper and hypermarketsFishmongers

Each seaweed species, however, has its own properties that vary according to the **season** and **or/production site**, and some have a higher protein, iodine or dietary fibre content than others. Many consumers are actively employed and may prefer to grab a bite to eat at lunch or would rather not cook in the evening after a long day at work. For these people, processed seaweed-based products can offer a **healthy diet** whilst **limiting the time spent cooking**.

What product innovations?

Two measures are put forward to highlight the nutritional and dietetic properties of edible seaweed and make the “health” or “slimming” benefit of some of the French-style products more visible: creating a “**dietetic**” seaweed product range and displaying a **nutritional claim** as well as **healthy/dietetic recipes** on the packaging.

	“Dietetic” seaweed product range	Nutritional claim and recipes on packaging
Product innovations	<ul style="list-style-type: none">• Fresh, low-calorie dietetic recipes suitable for women• Blended recipes suitable for older people with chewing problems• Packaging focussing on low-calorie, femininity and seaweed	<ul style="list-style-type: none">• Claim placed on packaging front, highly visible• Claim briefly presenting the benefits for health• Recipes (on the back)
Plus points	⇒ Range suitable for women and older people, both well represented in the target groups	⇒ Attracts consumers and informs them about the product ⇒ Helps consumers adopt the product and prepare it, alone at home
Minus points	⇒ Diversification too fine for the processor ⇒ Disruptive approach compared to the rest of the offering ⇒ Small target group	⇒ General nutritional claims subject to administrative control ⇒ Low-differentiating marketing strategy ⇒ Long process

What distribution channel and marketing?

Seaweed products intended to be eaten as health and/or dietetic food would be marketed in the same distribution channels as all French-style products, i.e. **organic chain stores** and independent **organic and health food shops**. These are regularly frequented by target women consumers and are relatively well-established in France.

In-store category marketing can also be used. This means placing “dietetic” seaweed products in the same section as **general “low-calorie” products**. Mixed salads and fresh blended salted products would be available in the **fresh produce** and/or **fresh snacking aisle**. Fresh blended sweet products -dairy products mainly- would be sold with **fresh dairy desserts**. Finally, ready-made meals and canned blended products would be found in the **soup, can and ready-made aisle**.

To improve the visibility and identification of seaweed products, which are still quite rare in the French diet, these should be placed **at eye and hand level** on shelves, so that consumers can easily see and grab them, within reach of best-sellers and preferably not far from smoked fish and salmon, which go very well with seaweed.

In-store category marketing

Plus points: improves access to seaweed food products by disseminating them in the different sections of the store, from the fresh produce aisle to the canned food section.

Minus points : makes seaweed products less visible as they are buried away among the mass of other products.

What communication?

The results of the surveys help identify a number of potential communication measures, in addition to those already mentioned. These measures aim to attract consumers, increase product value as well as reassure consumers and build loyalty. Communicating on the “health” and “slimming” properties of French -style seaweed products is possible at different levels.

	Objectives	Possible measures
In schools	<ul style="list-style-type: none"> Educate children about a healthy diet Reduce misgivings about seaweed taste and texture 	<ul style="list-style-type: none"> School canteen operations: acquaint young children with edible seaweed and its high nutritional value through Tasting Weeks, theme-based lunches or films and leaflets
In the media	<ul style="list-style-type: none"> Provide a large audience with the same information Disseminate information about edible seaweed and its benefits 	<ul style="list-style-type: none"> Multichannel communication campaign: use different communication channels (television, radio, Internet, health or women's magazines) to place advertisements about seaweed and its benefits paid for by a professional organisation alone or in partnership with public authorities Mass media: convey information about seaweed on TV (specialised TV programmes), the radio and the press (women's or health magazines)
At trade fairs	<ul style="list-style-type: none"> Connect processors/producers with visitors 	<ul style="list-style-type: none"> Trade fairs or events dedicated to health and well-being: communicate about the benefits of seaweed products, discuss with visitors, organise product tasting, hand out samples to be tasted at home
In-store	<ul style="list-style-type: none"> Create a link between seaweed products and consumers Reassure consumers about seaweed product taste and preparation 	<ul style="list-style-type: none"> Tasting events as part of promotional campaigns: in-store workshops led by nutritionists and dieticians explaining how seaweed is produced, processed and can be prepared plus a few recipes Dieticians' blogs and leaflets: remind consumers of the nutritional composition of the various seaweed species and suggest healthy, simple recipes

For further information

COMPARINI Charline, LESUEUR Marie, LE BRAS Quentin, LUCAS Sterenn, GOUIN Stéphane. 2016. *Quelles pistes d'actions pour impulser la consommation des algues en France*. Programme IDEALG Phase 3. Les publications du Pôle halieutique AGROCAMPUZ OUEST n°40 à 43, 136 p.

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All the results are available on the Fisheries and Aquatic Sciences Centre website: halieutique.agrocampus-ouest.fr • “Etudes et Transfert” section • IDEALG