# Traditional Products Enriched with Seaweeds – A Promising Strategy to Introduce Seaweeds in the Diet of the Portuguese

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## INTRODUCTION

Seaweeds are marine food resources valued in some cultures since early times. The recent tendency for the introduction of seaweeds in food is seen not only as a contribution to deal with concerns related to food security, but also as being of major importance in economic, nutritional, health and environmental terms.

## AIMS

Project Alga4Food aims the development of new strategies and products which can contribute to introduce seaweeds in the Portuguese dietary habits.

## METHODS

As food consumption is intimately related to cultural aspects, habits, and individual characteristics, perception of new food products as familiar has be pointed out as one of the main determinants of acceptance. Connections to tradition can also provide an element of trustworthiness.

The introduction of seaweeds is one of the strategies used by the Alga4Food project in the development of new products compatibles with the habits and dietary references of the Portuguese.

## RESULTS

A tomato jam with *Bifurcaria bifurcata* was produced, as well as two dairy products enriched with three autochthonous seaweeds (*Palmaria palmata*, *Porphyra* spp. and *Ulva* spp.) (**Figure 1**) – butter and hard goat cheese (**Figure 2**) produced at 'Granja dos Moinhos' cheese factory.


**Figure 1** Three autochthonous seaweeds.
A. *Palmaria palmata*. B. *Porphyra* spp. C. *Ulva* spp.


**Figure 2** General aspect of two dairy products enriched with seaweeds.
A. Goat cheese. B. Goat butter.

The tomato jam was offered at some events for dissemination of the Alga4Food Project and the acceptance was very positive (**Figure 3**). Qualitative sensory evaluations of the butter and the cheese were performed by a focus group. Butter was extremely well accepted. The cheese was evaluated as a moderately appealing product. Suggestions were made for its improvement and new versions are currently under development

**Figure 3** Tomato jam being served at a scientific event.
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## CONCLUSIONS

We believe that these preliminary studies show the potential of this approach to familiarize the Portuguese with the consumption of seaweeds. It can also contribute to promote innovation in the artisanal food sector.

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