Details of Technology



Name of Technology	Development of a tasteful extract from stock derived from marine resources	Life Science
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Key words	marine products, seasoning fluid, amino acids, desalination, <i>umami</i> taste	

What kind of technology is this?



"Desalination," "concentration of free amino acids," "adjustment of ion balance," "sterile filtration" and "removal of heavy metals" in the stock derived from the marine resources are performed by a parallel process system. And, we show you the method for preparing tasteful and hygienic seasoning extract.

The stock obtained from the marine products can become a tasteful extract by the concentration because of being rich in amino acids and highly nutritive. The salt concentration is extremely high because of the sea origin and it has to be paid an attention to the microorganism management.

Thus for the preparation of the functional seasoning fluid, the value-added stock derived from the marine resources, it is necessary to investigate "desalination, remaining free amino acids, adjustment of ion balance, sterile filtration and removal of heavy metals" of a sample, taking into consideration HACCP.

To dissolve this problem, we worked out a laboratory-scale system and performed various measurements. As the result, we could develop the stock extract with low salt concentration, low heavy metal concentration and high free amino acid concentration, and the result of the good taste test was also satisfactory.

Here we introduce in detail how to handle the equipment system.

What are its applications?

- · Marine extract rich in amino acids with high nutritious and hygienic values can be produced.
- · Highly functional components can be also included (under investigation).
- · It can be also considered that the extract is usable as a dressing and a naturally occurring food additive.

Related patents		
Related materials	There is no related material to be described specifically. In case of a collaborative research, a researcher is required separate	

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