

METHOD OF EXTRACTING AND MANUFACTURING OYSTER MEAT EXTRACT USING DEPRESSURIZED OR PRESSURIZED EXTRACTION METHOD

ABSTRACT

A method of extracting and manufacturing an oyster meat extract using pressurized or depressurized extraction, the method comprising: an extraction step of storing oyster meat in an extraction container where a solution is stored and extracting, within the extraction container, the oyster meat extract from the oyster meat;

a step of concentrating the oyster meat extract extracted in the extraction step;

an agitation step of adding an ethanol solution to the concentrated oyster meat extract and performing agitation;

a separation step of performing separation into a precipitate and a supernatant solution after a predetermined time after the agitation; and a concentration step of concentrating the obtained precipitate,

wherein the extraction step is a step in which the extraction is performed in a state where a pressure is increased to a normal pressure or more or in a state where a pressure is reduced to the normal pressure or less such that it is possible to perform the extraction from all portions without damaging the oyster meat and extract a large number of types of active ingredients of the oyster meat extract;

the agitation step and the separation step are a centrifuging step using a continuous centrifuge,

the continuous centrifuge includes: a storage member that has a storage space portion therewithin; a rotary shaft portion that is arranged within the storage member and that is configured to be rotatable with a longitudinal direction being a center shaft direction; a rotary member that has a plurality of rotary blades spaced a distance apart from an outer circumference of the rotary shaft portion; a rotary means that rotates the rotary member; an injection portion that continuously injects a solution to be separated into the storage space portion; a discharge portion that centrifuges the solution injected from the injection portion and that continuously discharges a separated fluid from a side portion of the storage space portion; and a solution discharge portion that continuously discharges a remaining solution separated from the fluid,

in the centrifuging step, the solution containing the extracted and concentrated oyster meat extract is fed out from a left-side pipe to a feed-out tube such that an amount of the solution which is fed out can be adjusted, the ethanol solution is fed out from a right-side pipe to the feed-out tube such that an amount of the ethanol solution which is fed out can be adjusted, both the solutions are continuously fed out to the injection portion and both the solutions continuously fed out are stored in the storage member,

both the solutions are agitated by rotating the rotary member, and a centrifuging operation is performed, the fluid is brought, by the rotation, close to a side of an apex angle portion of a side wall of the storage member which is recessed in a triangular shape,

when the fluid is collected in the side of the apex angle portion of the side wall of the storage member which is recessed in the triangular shape, an opening and closing operation is performed by an operation liquid, and a plurality of discharge holes that are spaced a predetermined distance apart in a circumferential direction in the apex angle portion of the side wall which is recessed in the triangular shape are opened,

the fluid is continuously discharged by a plurality of the discharge holes through the discharge portion to an outside,

the remaining solution separated from the fluid is moved to an upper portion of the storage member by rotation of a plurality of the rotary blades extending outward in a shape of a skirt from the outer circumference of the rotary shaft portion, and is continuously discharged from the solution discharge portion arranged in the upper portion of the storage member, and

the remaining solution continuously discharged is concentrated, thereafter the ethanol solution of a predetermined concentration is added again thereto, the resulting solution is separated with a second continuous centrifuge and is continuously discharged from the solution discharge portion.

Figure 1