

TAL 797 – Seminário

16 de Novembro de 2022.

SOUS VIDE COOKING PROCESS

Pós-graduando: Débora Rezende Ferreira.

Orientador: Prof^a. Edimar Aparecida Filomeno Fontes (DTA)

Changes in meat properties are influenced by the temperature and time used in the cooking process. Sous-vide cooking is a process in which food is cooked under vacuum in thermostable packages under low temperatures and long times, followed by cooling.

The word sous-vide comes from French and means “under vacuum”. In the sous-vide cooking method, raw foods are vacuum-sealed in thermostable packaging, cooked in a water bath at a temperature below 100°C for a long time, and subsequently cooled. The cooling applied to sous-vide meat products aims to paralyze the heat treatment and then they are kept under refrigeration.

When compared to the traditional cooking method (boiling, frying, roasting, for example), greater preservation of volatile compounds, moisture and nutritional value of food processed by sous-vide is observed. Another advantage is the minimal possibility of recontamination, since repackaging is not necessary, and can be marketed in the packaging used for cooking.

In meat products, sous-vide cooking usually takes place at temperatures between 50°C and 65°C, for long periods (usually 2 to 8 hours). At relatively low temperatures, meat juiciness is maintained while flavor and tenderness are improved. However, concerns about this method focus on the ability of the heat treatment to achieve microbiological.

References:

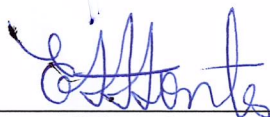
AYUB, H.; AHMAD, A. Physiochemical changes in sous-vide and conventionally cooked meat. **International Journal of Gastronomy and Food Science**, v. 17, n. October, 2019.

D. E. Baldwin, “Sous vide cooking: A review” **Int. J. Gastron. Food Sci.**, vol. 1, no. 1, pp. 15–30, 2012, doi: 10.1016/j.ijgfs.2011.11.002.

KURP, L.; DANOWSKA-OZIEWICZ, M.; KŁĘBUKOWSKA, L. Sous Vide Cooking Effects on Physicochemical, Microbiological and Sensory Characteristics of Pork Loin. **Applied Sciences (Switzerland)**, v. 12, n. 5, 2022.

OLATUNDE, O. O.; BENJAKUL, S. Sous-vide cooking as a systematic approach for quality maintenance and shelf-life extension of crab lump meat. **Lwt**, v. 142, n. January, 2021.

PARK, C. H. et al. Combined effects of sous-vide cooking conditions on meat and sensory quality characteristics of chicken breast meat. **Poultry Science**, v. 99, n. 6, p. 3286–3291, 2020.



Orientadora

gov.br

Documento assinado digitalmente

DEBORA REZENDE FERREIRA

Data: 15/11/2022 17:49:57-0300

Verifique em <https://verificador.iti.br>

Orientada