EVALUATION OF THE TYPE OF THERMAL PROCESSING IN SENSORY
CHARACTERISTICS OF SQUIDS (Loligo spp.)

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The cooking process is responsible for the squid microbial elimination, also prepares the
product with desired characteristics for consumption. The final quality of the squid is decisive on
the consumer acceptance. Thus, we evaluated the influence of different types of heat treatment
on physical and sensory characteristics of the Loligo spp. acquired in Florianópolis – Brazil’s
markets, in natura and frozen. The raw material was collected from different shops and cooked
by steam, immersion, microwave and ultrasound. The pH, humidity, water loss during cooking,
water retention capacity and color were analyzed for the fresh and frozen product before and
after treatment (immersion at 95°C/5 min; steam at 95°C/5 min, microwave at 80°C/5 min and
ultrasound 700 W/1min). The average pH of two samples was 9.0, while the other samples had
values provided by Brazilian legislation (6.8), without influence of heat treatments. There was
weight loss in all samples tested, where the cooking by immersion showed the lowest losses
(47 %) and microwave cooking the highest (84 %). The average initial moisture content was
85.49 % and showed an average reduction of 10.45 % in all treatments. In the color global change
(ΔE), there were changes between the fresh sample and after heat treatments (9.2) possibly
influenced by prior freezing of the samples before cooking. The method of steam cooking caused
greater decrease in shear force in beef and squid (18 N), and presented the
best physical-chemical characteristics of the product, regardless of their source of purchase.