

Development of a Crispy Snack by Incorporation of Chicken Gizzard and Liver with Rice Flour

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A balance nutritive diet means a healthy life of any person. Many people cannot afford to consume protein sources. Nowadays people like to have snacks in between their main meals. It is important to promote local resources like rice in producing such products. Gizzard and liver are high protein sources. Incorporating such organ meat to a snack will be economical and can facilitate self employment. Preliminary trials were carried out to finalize rice flour, pepper and other spices with coconut milk in the recipe. Two sensory trials were carried out to find the best levels of chicken liver and gizzard. With finalizing the optimum percentage of organ meat another trial was carried out to find the best combination. Then the selected sample was subjected to keeping quality and proximate analysis with control. Crispy snack which has 10% gizzard was the best over control in the last trial ($p > 0.05$). Sample which has 10% gizzard and control was analyzed for nutrition composition. Sample which has 10 % gizzard contains 25% more protein than control. Crude fat and ash content are similar in both samples ($p > 0.05$). Moisture content is higher in control. Thiobarbituric acid (TBA) value of sample and control significantly reduced during first seven days and reduction was not significant ($p > 0.05$). pH has same pattern where pH reduce during first 14 days and then increases ($p > 0.05$). This causes formation of free fatty acids and amino acids. With time Water Holding Capacity (WHC) increases in both samples. After seven days WHC reduces in treatment sample. This causes high protein content and presence of more rice flour in the control. Sample which contain 10% gizzard has more protein and is better than the control with reference to the keeping quality.

Key words: Gizzard, Rice flour, Crispy snack, Keeping quality, Sensory