

## Dialling Back the Salt in Meat Snacks



### Yeast Extract as a Potential Salt Substitute

Demand for convenience foods has increased as consumer lifestyles become busier and more hectic, and they increasingly seek for a quick and easy meal replacement<sup>13</sup>. According to a survey conducted by Innova Market Insight (2020), over one in four consumers preferred to eat snacks instead of full meals<sup>2</sup>. This has eventually raised the demand for snacking products that are rich in protein and packed with flavour<sup>6</sup>.



Figure 1. Meat Snacks – Global forecast for retail (2018 – 2024)

The global meat snack market value in the retail sector was estimated at over €13 billion in 2022 and the forecast shows that that number will rise to €15 billion in 2024 (Figure 1)<sup>6</sup>. Meat snacks are a type of convenient food product that is processed from different animal sources such as beef and turkey. They are available in ready-to-eat formats such as jerky, stick, sausage, and bars<sup>9</sup>. Meat snacks are also an excellent source of protein and other nutrients such as minerals and vitamins<sup>6</sup>. According to an online survey conducted by Alarcón-García et al. (2021)<sup>1</sup>, it showed that consumers opt for meat snacks due to their high protein content. Another factor that meat snacks have to offer is their small and innovative on-the-go or easy-to-carry packages, making them convenient and easy to eat<sup>5</sup>.

### Cutting Back on Salt Intake

Salt is the most commonly added ingredient in processed meat because it is beneficial for enhancing the quality of the products<sup>2</sup>. Salt contains high amounts of sodium<sup>2</sup> which is essential for the maintenance of cellular membranes and the absorption of nutrients in the small intestine<sup>8</sup>. Furthermore, it maintains a proper water balance in our body by constantly adjusting the fluid and blood levels<sup>8</sup>. However, excessive sodium intake poses a significant

risk to human health such as high blood pressure which is associated with cardiovascular disease and stroke<sup>2</sup>.

The World Health Organization recommends a sodium intake of 2 g/day (Na) equivalent to 5 g/day of salt (NaCl) as a safe and adequate dose for the adult and children population<sup>12</sup>.

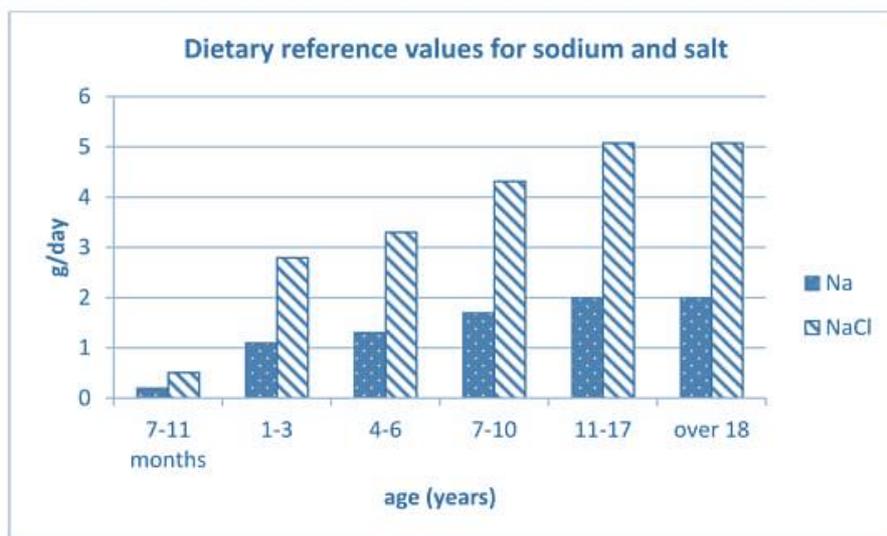


Figure 2. A dietary reference value for sodium and salt intake in adults and children

Since snacking is becoming a more personalised dietary trend, consumers have a variety of attitudes and goals, ranging from wellness and health concerns<sup>4</sup>. Thereby, the general concern pertaining to sodium intake has led to the development of methods by manufacturers to reduce the amount of salt added to meat products<sup>10</sup>.

### The Savoury Side of Yeast

Flavour enhancers have been used for close to a century to substitute salt fully or partially in meat products<sup>2</sup>. One that can effectively substitute the beneficial effects of salt and enhance the savoury taste is yeast extract<sup>11</sup>. Yeast extract is a natural ingredient derived from the digestion of yeast cells or known as the natural source of volatile compounds that

serves as precursors to a compound formation. Hence, it provides pleasurable tastes and aromas in meat products<sup>3</sup>.

Incorporation of yeast extract into a formulation can also rebuild the savoury flavour through amino acids which contribute to the umami flavour and allows a consumer to experience a positive reaction and perception of the product taste, without the need of adding more salt<sup>7</sup>.

Studies also supported that yeast extract extends the perception of salty taste and can reduce the sodium content in the final product by 40%<sup>11</sup> and give acceptable sensory qualities in terms of aroma, taste, and texture<sup>3</sup>.

## Conclusion

Natural ingredients are now highly sought after due to their health benefits<sup>2</sup>. Therefore, identifying natural ingredients as a salt substitute can reduce high amounts of salt in the formulation, and thereby support a balanced diet and health. At DPO International, we are honoured to be in partnership with **Halcyon Proteins** to bring you a range of ingredient choices that will elevate the quality of your meat products.

## References

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