ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 21 No. 9
October 2021
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

Afr. J. Food Agric. Nutr. Dev. 2021; 21(9): 18611-18628 https://doi.org/10.18697/ajfand.104.21110

DEVELOPMENT OF AN ENERGY-DENSE BISCUIT SUITABLE FOR PRIMARY SCHOOL LEARNERS FOR THE SOUTH AFRICAN NATIONAL SCHOOL NUTRITION PROGRAMME

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ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 21 No. 9 October 2021 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

ABSTRACT

South Africa has a well established National School Nutrition Programme (NSNP). Despite rescheduling the mealtime to two hours after the start of the school day to accommodate learners who come to school on an empty stomach, a gap still exists as many children start their learning day with low energy and concentration levels. A cost-effective, energy-dense snack served at the start of the school day can be a solution to sustain learners until the main meal is served. Cross-sectional surveys were used to determine the snack preferences of children and the product development process was used to develop a suitable snack. An energy-dense peanut butter biscuit was developed based on those surveys as well as a scoping review of previous snack studies. The energy-dense developed product provided 1388kJ (61.0%) of energy from fat, 688kJ (30.2%) of energy from carbohydrates and 201kJ (8.8%) of energy from protein per 100g. The biscuit conformed to microbial testing standards. Shelf-life analysis projected a shelf-life of five weeks fresh and five months in food grade packaging. Sensory results showed that there was no significant difference in sensory scores across gender ($p=0.691$) and age ($p=0.706$). More of the learners (n=56, 69.1%) found the biscuit to be 'Super good' than the other ratings ($p<.0005$). When compared with similar biscuit products currently on the market, it was found that the developed biscuit was the most reasonably priced. The developed biscuit has the potential to serve as a solution to hidden hunger for children that come to school on an empty stomach. This versatile snack solution has potential for continuity of use even during periods of national crisis as with COVID-19, when learners' nutritional needs may be most vulnerable.

Key words: National School Nutrition Programme, energy-dense snack, cost-effective, South Africa, product development

https://doi.org/10.18697/ajfand.104.21110

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INTRODUCTION

Background

School nutrition programmes stem from the need to foster a better quality of education by enhancing the child's active learning capacity, alleviating short-term hunger, providing a positive incentive for learners to attend school regularly and addressing micronutrient deficiencies [1]. School feeding programmes are adopted in many developing countries worldwide but more so in Africa in countries such as Ghana, Kenya, Angola, Nigeria, and South Africa to name a few [2]. These feeding schemes have many objectives that benefit the children by reducing short-term hunger, improving the health and nutrition status of the learners and encouraging attendance to school [3]. In South Africa, the National School Nutrition Programme (NSNP) is well established to ensure that school learners attending quintile one to three schools are not left hungry and unable to focus by providing a free, nutritious meal for the 189 school days in the year [4]. Schools in South Africa are ranked according to fees where quintiles one to three are regarded as the poorest schools in the community and thus are "no-fee paying schools" and quintiles four and five are regarded as affluent and are "fee-paying schools" [5]. A review of the NSNP programme in 2016, found that the required quantities of macronutrients were not served and delays in feeding by the stipulated time (10:00am) were also noted [4].

In 2018, approximately 2.1 million children experienced hunger in South Africa; 19% affected children hailed from North-West and 18% from KwaZulu-Natal (KZN) province [6, 7]. By race, child hunger differed significantly with 12% of children from African households, 7% from coloured households and less than 1% of children from Indian and white households [6]. The NSNP is currently challenged to ensure that in all provinces, learners' energy and concentration levels are suitably sustained until the main NSNP meal can be served and with the current child hunger levels in South Africa, the need to develop an energy-dense snack item for school learners is critical [4]. This challenge became more evident during the first COVID-19 lockdown in South Africa, where children who were dependent on the NSNP for one meal were left stranded [8]. It is within this context that this article explores the development of an energy-dense, cost-effective, and sensorial acceptable snack suitable for the NSNP.

MATERIALS AND METHODS

The study was based on product development where an energy-dense snack was developed to meet the needs of primary school learners on the NSNP. The product development process started with a snack preference survey to gauge the snack preference of primary school learners and to inform a suitable snack for development. Sensory evaluation was conducted during the snack development trials using a trained personnel panel to guide the development of a sensorially acceptable snack product. The final snack underwent microbial testing, nutritional analysis, shelf-life testing and was presented to a sample of learners for consumer sensory evaluation to determine sensory acceptability of the developed snack.

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Sample population

The study population consisted of primary school learners from two schools, between the ages of nine and thirteen years who were in grades five or six. These learners were specifically chosen as they would have been exposed to the NSNP for the greatest amount of time at a primary school. Grade seven, an exit year into high school, was excluded due to uncertainty of the time of data collection. The quintile list of primary schools in the KZN province was obtained from the Department of Education (DoE) to identify schools in the range of quintile one to three that received meals from the NSNP in the KZ, Durban area. After contacting a list of schools, two schools that belonged to quintile three category agreed to participate in the study. Eighty-five consenting learners participated in the snack preference survey. It has been reported by Zoecklein [9], that at least 50 or more participants in a sensory study yields more accurate results and a better understanding of consumer views.

Due to the magnitude of the COVID-19 spread and the resulting containment efforts, only one school, out of the two chosen, agreed to participate in the consumer sensory evaluation. Eighty-one learners participated in the sensory evaluation. The sample size was reduced due to some learners' reluctance to return to school during the COVID-19 pandemic. Eight consenting staff and students (four staff and four students) from the Department of Food and Nutrition at the Durban University of Technology (DUT), familiar with sensory testing procedures were used as trained sensory panellists in each stage of the product development trials.

Snack preference survey

A semi-closed snack preference survey was designed by the researchers to determine the type of snack primary school children would prefer. The survey was piloted among n=10 children between the ages of nine and 13 years to check understanding and ease of interpreting the survey. The options on the survey were: biscuits, muffin, porridge, and an option for 'other snacks', where learners could provide a preferred snack that was not presented on the selection list. The survey form was printed back-to-back with one side of the survey in English and the other translated to Zulu.

Product development

The findings from the snack preference survey and the scoping review, concluded that a biscuit would be an optimal snack for development.

Six recipe development trials were undertaken in the development of an appropriate, sensory acceptable, energy-dense snack. Trials were conducted by the researcher in a laboratory (test kitchen) at the Department of Consumer Science: Food and Nutrition at the DUT. The main protein and energy-dense ingredients that were used in the development of the biscuit were soybean flour, peanut butter and oat flour. The combination of these energy-dense ingredients in various proportions were tested for sensory acceptance before a suitable ratio could be determined that had a favourable impact on the texture, appearance, aroma and taste.

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Trained sensory trials

Product samples from the recipe development trials were subjected to sensory evaluations by a trained panel consisting of the eight staff and students using a hedonic sensory test. A Likert scale was used to gather quantitative data from each panelist to indicate the degree of like or dislike according to specified categories. Qualitative feedback gathered from the biscuit evaluation provided valuable insights into the acceptability of visual appeal, texture, flavour, and aroma. After each sensory evaluation, the recipe was reformulated until the biscuit was deemed sensorially acceptable.

Microbiological testing

Microbiological testing was conducted in a South African National Accreditation System (SANAS) accredited laboratory using Standard SABS methods for microbial testing of foods using selective media [10]. A yeast and mould plate count test was conducted on the biscuit to determine the presence of harmful microorganisms in the product.

Nutritional analysis

The final version of the energy-dense biscuit was subjected to nutrient testing in an accredited laboratory according to the SANAS standards utilising Association of Analytical Chemists International (AOAC 2000) methods. Association of Official Agricultural Chemists methods are standardised globally and ensure accuracy of testing [11]. The biscuit protein content was determined by the Kjeldahl Method which is calculated by digesting the product in a strong acid causing it to release nitrogen that is determined by a suitable titration technique. The amount of protein remaining was calculated from the nitrogen concentration of the food [12]. The amount of fat in the biscuit was calculated by Soxhlet method which uses a solvent to extract the fat from the sample the fat recovered is then weighed [13]. The carbohydrates were calculated by difference meaning that the approximate carbohydrate value was determined by subtracting the measured protein, fat, ash and moisture from the total weight [14]. The snack was tested and the nutrient content was provided in accordance with the regulations relating to labelling and advertising for foodstuffs in South Africa [15].

Shelf-life testing

Accelerated shelf-life testing was conducted to establish the amount of time the snack can be stored in its final packaging before quality, structure and microbial deterioration can occur. The shelf-life study was conducted by storing the product according to accelerated storage conditions and testing it daily against quality and microbiological criteria until it was no longer acceptable.

Child-centred Sensory evaluation

The seven-point hedonic scale was adapted from the nine-point hedonic scale which depicted a scale of positive and negative levels which ranged from 1= Super bad to 7= Super good [16]. Meilgaard, Civille and Carr [17] affirm that lower scales using pictorials are more acceptable to use for children of a grade-school age as it is easily understood and comprehended. This information advised the sensory evaluation sheet that was created where the scale was dropped from nine to seven points with

accompanying smiley faces according to like or dislike. For children extra adaptations may be made for example, smiley faces along with the hedonic scale can be used to represent how much the sample was liked or disliked [18]. The theory behind the smiley face hedonic scale is that children find the pictures entertaining and are thought to attract more attention to the task at hand [19]. This information advised compilation and shaping of the consumer sensory evaluation sheet which was then translated into Zulu.

Statistical analysis

The results of the snack preference survey and the sensory evaluation survey were statistically analysed using Statistical Package of the Social Science (SPSS) (software version 26.0® SPSS Inc. Chicago, II, USA). The chi-square goodness-of-fit test was used to test for significance in preference for the snacks and the chi-square test of independence was used to test for differences across age and gender. For the sensory evaluation survey non-parametric tests were used. The Mann-Whitney test for significant differences in scores across gender and the Kruskal Wallis test for significant differences across age was used. The chi-square goodness-of-fit test was used to see if any score was selected significantly more than others.

Ethics

To ensure ethical credibility, permission was obtained from various gatekeepers before proceeding with the study.

First, the DUT Institutional Research Ethics Committee (IREC) issued an ethics clearance letter for permission to conduct the study (IREC no: 103/19). Second, gatekeeper permission was obtained from KZN DoE to conduct the study at primary schools. Third, gatekeeper permission was obtained from principals to conduct the study at their schools and lastly, permission was obtained from parents to allow their children to participate in the study.

During the sensory evaluation session, learners were told that if they wish to withdraw from the study, they were free to do so at any point in the session. Learners were made aware of potential allergens in the product sample. A strict code of hygiene based on DUT and Department of Higher Education and Training (DHET) COVID-19 regulations was adhered to during the product development process. All COVID-19 protocols set out by the DoE were adhered to during the sensory evaluation [20].

RESULTS AND DISCUSSION

The production of any new food item requires a rigorous research stage that should include data collection on the preferences of the target population. High failure rates in new food product developments are mainly due to low investments in Research and Development (R & D) initiatives and exclusion of consumer preferences when developing a product [21]. For the development of food products, Fullers model is recommended [22]. Fullers theory is more acceptable for use to develop food products as it makes use of subjective tests to measure the sensory properties of new food products that are believed to be more accurate in determining consumer acceptability

and preference [22]. Subjective tests were used as it is commonly used to determine human acceptance to new products as well as helping to obtain feedback for making modifications to a product. On the other hand, objective tests measure one attribute of a food product rather than whether the quality of the product is acceptable [23].

Snack preference survey

The first two steps of product development are the idea generation and screening of ideas where the consumer needs are identified, and a potential product idea is decided. A snack preference survey was conducted to determine the snack item most preferred. Among the learners that took part in this survey, 50.6% were girls and 49.4% were boys (Table 1). The most preferred snack was muffins which was liked equally by both girls (55.8%) and boys (57.1%). The learners who preferred muffins the most were aged between 10 (n=19, 22.35%) and 11 (n=16, 18.82%). The Chi-square goodness-of-fit test was used to find out if there was a significant difference in the frequency of snacks preferred. Significantly more learners preferred muffins (48-56.5%) and biscuits (28-32.9%) ($x^2(3) = 62.435$, $p<.0005$). The consumer appeal for muffins is found in the soft texture, sweet taste and ready to eat nature but due to wheat flour being one of the main ingredients, it is low in essential amino acids contributing to its poor nutritional value [24]. It is possible that muffins were chosen because of their value perception due to size as most commercial biscuits are small, however a study based on snack consumption and preference found that "taste" was a common reason for choosing a snack [25].

The second most preferred snack, biscuits was equally liked by both girls (32.6%) and boys (33.3%). The learners who preferred biscuits the most were aged 10 (n=8, 9.41%) (Table 1). A research study by Banureka and Mahendran [26] that focused on wheat-soybean biscuits in Sri Lanka found that biscuits have a wider consumption base and can have a long shelf-life, making it easy to produce and distribute on a larger scale. Using the Fisher's Exact test to determine if there are non-random connections between gender and snack choice and age and snack choice [27], it was found that there was no significant relationship between gender and choice of snack (p=1.000) as well as no significant difference between age and choice of snack (p=0.141). From the snack preference survey and a scoping review of literature by on school feeding programmes and past snack interventions that have shown success in Africa [28], the research team decided to develop a biscuit, factoring in shelf-life, cost-effectiveness, and ingredient nutrient density.

Trained sensory trials

For the third, development stage, trained sensory trials were undertaken by the Food and Nutrition staff and students to determine sensory acceptability of the recipe. Six sensory trials were administered to eight consenting panellists from the Department of Food and Nutrition. At each trial, the appearance, texture, flavour and aroma were examined and rated. Qualitative data was extracted, and comments were made on each aspect of the qualities of the biscuit. Changes to the recipe were affected until a final recipe that had suitable visual appeal, texture, flavour and aromatic qualities was mastered. A crispy peanut butter flavoured crunchie was created after six trials. The final recipe contained the following ingredients: 21.7% wheat cake flour, 19.3% brown

sugar, 16,2% peanut butter, 14.5% margarine, 10.4% oats, 8.2% soy flour, 5.5% golden syrup, 3.5% egg, 0.5% vanilla essence, 0.09% baking soda and 0.04% salt. The recipe yielded 432g of dough and was divided into twenty portions of ~22g per biscuit. After baking, the mass reduced to ~20g per biscuit due to moisture loss. Once cooled, the biscuits were packaged and sealed for distribution. The production cost of the biscuit is an important factor as it can influence acceptability and viability for use as a snack in the NSNP. A product that is reasonably priced along with local sourcing of the ingredients, can enrich the community as well as bolster the nutritional programme set by the government [29]. Schools are seen as a predictable market for small local businesses as school feeding schemes create a local income by linking to local suppliers, households, businesses and traders making it a sustainable venture for an energy-dense snack development initiative [30].

Microbiological testing

The fourth stage of the development process was the production stage which involved establishment of product specifications such as microbial testing, nutritional testing, and shelf-life testing. Microbial testing is used to rule out any contaminants, microorganisms or pathogens that can potentially cause spoilage or food poisoning and ensure that the product is microbiologically safe for consumption [31]. Two samples were used to determine the microbial analysis of the product. For yeasts and moulds, a sample of the product was placed in a selective culture medium and aerobically incubated at a temperature of 25°C for 3-5 days. The number of yeast and mould were calculated per gram. The results showed that no coliform bacteria were present, and one colony yeast and mould were detected (Table 2). Total plate counts were zero, showing no bacterial growth, deeming the product safe to consume. According to the World Health Organisation [32] standards, the maximum limits for total microbial plate count is $2.0x10^5$ cfu g^{-1}, coliform bacteria <200MPN g-1, yeast and mould is $<1.0x10^4$ cfu g^{-1} with E.coli absent. The factors that influence microbial quality of baked goods are moisture content, pH and water activity where high moisture products such as muffins and cakes have more water activity thus more food safety concerns. The developed product was deemed safe to consume as it had a relatively low moisture content. The product conformed to the regulations governing microbial standards for foodstuffs and related matters Government Notice No. R490 of 8 June 2001 (South Africa Department of Health 2010: 46).

Nutritional analysis

The International Dairy Federation (IDF) Standing Committee on Nutrition and Health and IDF Standing Committee on Marketing [33] studies have shown that quality education and health and nutrition programs, for example school feeding programs, can benefit child development. Proper nutrition can enhance school performance and assist in the ability to learn and promote attendance [34]. Biscuit samples were used to obtain the nutritional analysis of the product (Table 3). The main energy-dense nutrient was fat which accounted for 277.6kJ of energy (61.0%) per 20g serving. The second most energy-dense nutrient was carbohydrates accounting for 137.6kJ of energy (30.2%) per 20g serving. Protein contributed 40.2kJ of energy (8.8%) per 20g serving. The total ash contributed to 1.7g per 20g serving and crude fibre was 0.2g per serving.

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Shelf-life testing

For shelf-life testing of the product, the samples were individually packaged in 150mm x 250mm plastic bags upon submission to the laboratory (Table 4). To determine the shelf-life of the product, the moisture content of the product was calculated by loss-on-drying using a drying oven where the sample was placed in the drying oven at a consistent temperature of 106°C for a defined period. The sample was weighed before and after drying and thus the difference is the resultant moisture content [35]. The moisture content is important as it directly affects the shelf-life and quality of the product [36]. Moisture is seen as the limiting factor during storage and is what controls the shelf-life of the product [37]. Twelve samples were taken and weighed each day for a period of five days and again after five months to determine the shelf-life of the product. Results show that the samples were adequate, and no signs of spoilage or product deterioration had occurred when stored in a cool dry place away from direct sunlight. The projected analysis is five weeks fresh, and five months stored shelf-life in food grade packaging. These conditions are conducive to the school environment.

Sensory evaluation

In the fifth stage of the product development process, consumer trials are undertaken to determine the consumer acceptability of the product. More girls (n=46, 56.8%) participated in the sensory evaluation and fewer boys (n=35, 43.2%) (Table 5). According to age, there were more 10-year-olds that participated in the sensory evaluation (n=52, 64.2%) whilst the nine-year olds made up the least participants for the sensory evaluation (n=1, 1.2%). A significant percent of the participants found the biscuit to be 'Super Good' (69.1%) ($p<.0005$) however, there was no significant difference in sensory scores across gender ($p=0.691$) or age ($p=0.706$). Majority of the learners found the product to be 'Super good' (n=56, 69.1%), (n=12) 14.8% rated the product as 'Good', and (n=10) 12.3% rated the product as 'Really good'. Only (n=3) 3.7% were undecided.

The energy-dense biscuit was compared two other commercial biscuits on the market in terms of macronutrients and cost per serving (Table 6). For a ~20g portion, sample #1 was priced at R4.99 ($0.34), Sample #2 was priced at R9.97 ($0.67) while the energy-dense biscuit cost price was R0.79 ($0.053) excluding packaging costs, making it the most reasonably cost-effective biscuit. Upon kilojoule comparison for 20g per portion, biscuit #1 provided 407kJ and biscuit #2 provided 410kJ compared to the energy-dense biscuit providing 455kJ per portion. The macronutrients show that biscuit #1 was higher in protein (3.2g) and fibre (1.9g) per portion, whereas biscuit #2 was higher in carbohydrates (9.6g) per portion. Biscuit #2 had the same amount of protein (2.4g) as the energy-dense biscuit. The energy-dense biscuit was slightly higher in fat (7.g) per portion compared to the two samples.

LIMITATIONS

In terms of geographical representation, the study was limited to quintiles one, two and three schools, but only quintile three schools participated in the study. Further to this, the study group was limited to two primary schools that were part of the NSNP, but only one school could not participate in the consumer sensory evaluation due to

COVID-19 drawbacks. Given the limitations, results of the study cannot be generalized to the greater KZN region.

CONCLUSION

The aim of this study was to develop a suitable cost-effective, energy-dense snack item which would increase the recommended daily nutrient for learners of the NSNP. While school feeding programmes are put in place to assist school children in acquiring important nutrients daily, the vehicle for the nutrients can take many forms but are not limited to porridges, biscuits, fortified beverages, cereals, and fortified bakery goods. A systematic product development process in conjunction with feedback from the children in response to a snack solution for the NSNP ensured the successful development of the energy-dense snack. The development of a morning snack together with the meal provided at lunch time has the potential to curb hunger and contribute energy to the RDA of the children. This study had several strengths and limitations.

The use of a systematic product development process, inclusive of the end-user snack preferences and acceptability of the snack is a strength of this study. The developed snack can be a potential solution in situations when the NSNP is not operational such as during the COVID-19 lockdown when children dependent on the cooked meal were left stranded. The biscuit has the potential of being distributed to children in emergency situations as it is prepacked and ready-to-eat. Future studies to determine the effect of the biscuit consumption by learners in terms of learner concentration, hunger reduction and nutritional benefit through randomized control trials should be explored. Most importantly, the developed biscuit has the potential to serve as a solution to hidden hunger for children who come to school on an empty stomach.

ACKNOWLEDGEMENTS

Author Contributions: The concept of this article was created by Saffia Hassanally and Ashika Naicker. The investigation and the collection of data were undertaken by Saffia Hassanally, Ashika Naicker and Evonne Singh. The writing of the original draft was by Saffia Hassanally, and the final review and editing were overseen by Ashika Naicker, Evonne Singh and Saffia Hassanally. All authors have read and agreed to the final version of the manuscript.

Competing Interest Statement
The authors declare no conflict of interest.

Funding: This research was funded by the Ada and Bertie Levenstein Scholarship in 2019, and the FoodBev SETA Research and Innovation Bursary Programme in 2020.

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Table 1: Snack preference survey results based on gender and age(n=85)

Snack preference	Gender		Age					Total
	Girls (n=43)	Boys (n=42)	n=9	n=10	n=11	n=12	n=13	
Biscuit	14 (32.6)	14 (33.3)	6 (7.05)	8 (9.41)	7 (8.23)	7 (8.23)	0	28
Muffin	24 (55.8)	24 (57.1)	2 (2.35)	19 (22.35)	16 (18.82)	8 (9.41)	3 (3.35)	48
Porridge	3 (7.0)	3 (7.1)	1 (1.18)	3 (3.53)	0	2 (2.35)	0	6
Other	2 (4.7)	1 (2.4)	0	3 (3.53)	0	0	0	3

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Table 2: Microbial analysis of the biscuit

Colony forming units per 1 gram

Sample	Coliforms	Yeast and mould	TOTAL COUNT (for one serving)
1	0	1	0
2	0	1	0

Standard South African Bureau of Standards (SABS) methods for microbial testing of foods using selective media

Table 3: Nutritional analysis of the biscuit

Nutrient	Quantity (grams)		Energy (Kilojoules)		Percent
	As per 100g	As per 20g (Serving size)	As per 100g	As per 20g (Serving size)	
Carbohydrates	42.01	8.40	688	137.60	30.22
Fat	36.72	7.34	1388	277.60	60.96
Protein	11.99	2.40	201	40.20	8.83
Moisture	0.62	0.12	n/a	n/a	n/a
Ash	8.66	1.73	n/a	n/a	n/a
Sodium chloride	0.01	0.00	n/a	n/a	n/a
Crude fibre	1.07	0.21	n/a	n/a	n/a
TOTAL ENERGY	----------	----------	**2277**	**455**	**100**

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Table 4: Shelf-life analysis of the biscuit

**12 Biscuit Samples in 150mmx250mm plain plastic bags-Weight/mass monitoring in grams*

SAMPLE	DAY 0	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	5 Month
1	18.8386	18.8660	18.5317	18.5983	18.3564	18.3765	18.3895
2	19.5358	19.6617	19.3233	19.3955	19.1521	19.1741	19.1838
3	20.0675	20.0870	19.7265	19.7959	19.5372	19.5638	19.5888
4	20.0677	20.0913	19.7358	18.8112	19.5571	19.6172	19.6216
5	20.1141	20.1383	19.8081	18.8951	19.6478	19.6805	19.7474
6	19.7079	19.7340	19.3924	19.4648	19.2196	19.2737	19.2632
7	20.2051	20.2318	19.8836	19.9605	19.7064	19.7255	19.7348
8	19.1929	19.2228	18.8822	18.9605	18.7242	18.7664	18.8024
9	19.1636	19.2045	18.3651	18.9678	18.6983	18.7267	18.7622
10	19.6300	19.6720	19.3381	19.4226	19.1806	19.2547	19.2547
11	20.0170	20.0469	19.7097	19.7925	19.5626	19.6025	19.6025
12	19.8387	19.8703	19.5336	19.6210	19.3551	19.4326	19.4326

Day 0- 11.03.20.
Day 1- 12.03.20.
Day 2- 13.03.20.
Day 3- 16.03.20.
Day 4- 17.03.20.
Day 5- 17.03.20.
5 month- 12.08.20.

https://doi.org/10.18697/ajfand.104.21110

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 21 No. 9 October 2021 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

Table 5: Sensory analysis of the biscuit according to gender, age and sensory scores (n=81)

		Super bad (%)	Really bad (%)	Bad (%)	Undecided (%)	Good (%)	Really good (%)	Super good (%)
Gender	**Girls**	0	0	0	2.47	8.64	7.41	38.27
	Boys	0	0	0	1.23	6.17	4.94	30.86
Age	**9**	0	0	0	0	0	0	1.23
	10	0	0	0	2.47	12.35	6.17	43.21
	11	0	0	0	1.23	1.23	3.70	19.75
	12	0	0	0	0	1.23	2.47	4.94

*Super good was chosen significantly more than the other ratings (p<.0005)

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Table 6: Cost and nutrient comparison

	Total kJ/ 100g	Total kJ/ 20g	Total CHO/ portion (g)	Total fat/ portion (g)	Total protein/ portion (g)	Fibre/ portion (g)	Cost/ portion (R)
Energy-dense biscuit	2277	455	8.40	7.34	2.40	0.21	0.79
Sample #1 (Nature's Choice carob and peanut butter biscuits)	2036	407	9.50	5.20	3.25	1.90	4.99
Sample #2 (Eat naked peanut butter biscuits)	2049	410	9.6	5.20	2.40	1.20	R9.97

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