

**Lifestyle and eating habits of bank employees in Mozambique****Estilo de vida y hábitos alimenticios de banqueros em Mozambique****Estilo de vida e hábitos alimentares de bancários em Moçambique**

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**ABSTRACT**

**Objective:** to evaluate the lifestyle and eating habits of bank workers in Mozambique. **Method:** a cross-sectional study with a quantitative approach, with 32 employees from three bank branches, selected through convenience sampling, in 2021. A food frequency questionnaire and a lifestyle questionnaire were applied. Descriptive statistics were employed for data treatment using SPSS v.25, presenting the data as absolute and relative frequencies. **Results:** in terms of lifestyle, 65.6% of participants were physically active, 100% were non-smokers, and 40.6% preferred fruits and vegetables instead of sweet and savory foods. Regarding food consumption frequency, the bread and equivalents group had the highest daily intake, with French bread (44%) being the most consumed, followed by the fruit and vegetable group with lettuce leading consumption (44%). The third group was meat and equivalents with the most consumed food in that category being fried egg (28%). The least consumed food group was oils and sauces with the most consumed in the category being salad dressings (19%). **Conclusion:** more healthy lifestyles and eating habits were evidenced.

**Descriptors:** Life Style; Feeding Behavior; Eating; Occupational Healths.

**RESUMEN**

**Objetivo:** evaluar el estilo de vida y los hábitos de los trabajadores bancarios em Mozambique. **Método:** estudio transversal con enfoque cuantitativo, con 32 empleados de tres sucursales bancarias, seleccionados mediante muestreo por conveniencia, en el año 2021. Se aplicó un cuestionario de frecuencia alimentaria y otro con preguntas

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sobre estilo de vida. Para el tratamiento de los datos se utilizó SPSS v.25 con la aplicación de estadística descriptiva, cuyos datos fueron descritos en forma de frecuencias absolutas y relativas. **Resultados:** en cuanto al estilo de vida, 65,6% de los participantes eran físicamente activos, 100% eran no fumadores y 40.6% consumían frutas y verduras en lugar de dulce y salado. La frecuencia de consumo de alimentos fue mayor ingesta diaria del grupo de pan y equivalentes y pan francés (44%) se consumió, siguiendo el grupo de frutas y verduras con lechuga liderando el consumo (44%), El tercer grupo fue carne y equivalentes con el huevo frito más consumido (28%), y el grupo más pequeño consumido fueron aceites y salsas siendo los salsas para ensaladas más consumidos (19%). **Conclusión:** se evidenciaron más estilos de vida y hábitos alimenticios saludables.

**Descriptor:** Estilo de Vida; Conducta Alimentaria; Ingestión de Alimentos; Salud Laboral.

## RESUMO

**Objetivo:** avaliar o estilo de vida e hábitos alimentares de trabalhadores bancários em Moçambique. **Método:** estudo transversal com abordagem quantitativa, com 32 funcionários de três agências bancárias, selecionadas através da amostragem por conveniência, em 2021. Foi aplicado um questionário de frequência alimentar e o outro com questões sobre estilo de vida. Para o tratamento de dados, usou-se o SPSS v.25 com aplicação de estatística descritiva, cujo os dados foram descritos sob a forma de frequências absolutas e relativas. **Resultados:** quanto ao estilo de vida, 65.6% dos participantes eram fisicamente ativos, 100% não fumantes e 40.6% consumiam frutas e vegetais ao invés de doces e salgados. Relativamente a frequência de consumo alimentar, houve maior ingestão diária do grupo de pão e equivalentes, sendo o pão francês (44%) mais consumido, seguindo o grupo de frutas e vegetais com o alface a liderar o consumo (44%), terceiro grupo foi de carne e equivalentes com o ovo frito mais consumido (28%), e o menor grupo consumido foi de óleos e molhos sendo molhos para salada mais consumido (19%). **Conclusão:** foram evidenciados mais estilos de vida e hábitos alimentares saudáveis.

**Descritores:** Estilo de Vida; Comportamento Alimentar; Ingestão de Alimentos; Saúde Ocupacional.

## INTRODUCTION

From the second half of the 20th century onwards, there have been noticeable changes in the global population's food consumption patterns, are being observed changes in the pattern of food consumption of the worldwide population concerning to typical agro-industrialized consumption, which is characterized by refined and high-fat

food choices, low fruit and vegetable intake, and the consumption of traditional rice and beans<sup>1</sup>. additionally, there is an increase in the trend of consumption of food away from home, further impacting individual's lifestyle and dietary habits<sup>2</sup>.

In addition to changes in food consumption, structural and technological changes in the production process has been observed in the work of different

professional categories, among which bank workers stand out. Bankers have been observed to be highly affected by occupational diseases, since their daily work is marked by a high demand for services, anxiety and pressure. These activities are likely to interfere with their eating habits and their health standard<sup>3</sup>.

Among the diseases of bank employees, include coronary disease, hypertension, diabetes, dyslipidemia overweight and obesity, occupational stress and mental disorders. These diseases are closely linked to lifestyle and eating habits, suggesting that dietary choices can have a positive or negative impact on the occurrence and management of occupational diseases<sup>4</sup>. Financial services workers exposed to adverse psychosocial working conditions are more likely to experience poor health, affecting both their mental and physical well-being<sup>5</sup>.

Bank employees are particularly vulnerable to occupational diseases, which can be exacerbated by a lack of knowledge related to healthy lifestyles. Factors such as workload, pressure, and the work environment, can influence their choices towards unhealthy lifestyles<sup>6</sup>. In addition, sedentary behavior and stress are prevalent among these professionals since they literally

spend the whole day attending to the public. This constant exposure to pressure and urgency can lead to heightened stress levels, overburdening the body. As a result, food choices may be driven by a desire for immediate gratification and comfort<sup>7</sup>.

The limited number of scientific articles published in Mozambique and Africa about the factors mentioned above inspired the need for research to generate valuable results. The aim is to provide insights that can guide the development of intervention measures tailored to the needs of the target group. With this, the objective of the research was to evaluate the lifestyle and eating habits of bank workers in Mozambique.

## **METHOD**

Cross-sectional study with a quantitative approach, was conducted in August 2021. The research was carried out in three bank branches located in Nampula city, situated in Northern Mozambique. The selection of Banking units for the study was non-probabilistic and based on convenience.

The inclusion criteria encompassed all employees of selected bank branches whereas the exclusion

criteria consisted of individuals who were not present during data collection. The choice of bank employees as research participants was based on the fact that they are a group of professionals vulnerable to occupational diseases related to food. Their tight work schedules leave them with little time for meals, which can influence their food choices and lead to unhealthy lifestyles.

Two data collection instruments were used in this study. The first was a validated food frequency questionnaire (FFQ) whilst the second was a questionnaire adapted from a dissertation study conducted by Cattafesta<sup>5</sup> in 2017, on the topic, “food consumption and associated factors in bank employees”, conducted in Brazil in 2017”. prior to starting data collection, the authors obtained credential from Lurio University, Faculty of Health Science, introducing us to the selected agencies.

Authorization was then obtained from the agencies after which data collection followed, lasting just over a week. Data collection was done by the authors in the selected bank agencies. The two questionnaires were delivered to the participants to answer individually, since the interviewers were

barred from entering the agency during working hours to administer the questionnaires.

Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS v.25) and Microsoft Office Excel 2016. Descriptive statistical analysis was performed, and involved the calculation of absolute values (n) and relative percentages (%).

Eating habits and bank employees were considered as dependent variables while Gender, Age, Marital status, Education Level, Occupation and Place of residence were independent variables.

For ethical issues, to ensure ethical considerations, approval was requested for and received from the bioethics committee of Lurio University, Faculty of Health Science. All ethical principles guiding research on humans, as set out in the 2013 Helsinki’s Declaration, have been respected. Participants surveyed signed the Informed Consent Form (ICF), to indicate their willingness to participate in the study<sup>8</sup>.

## RESULTS

In terms of socio-demographic characteristics of the interviewees,

59.4% were male. majority (53.1%) were between 31 to 45 years old whilst 46.9% were aged 21-30 in terms of job categories, majority were bank officers (40.6%), followed by bank agents

(21.9%), then managers (12.5%) and then supervisors (12.5%).

The table below depicts the lifestyle and eating habits of bank employees.

**Table 1 - Lifestyle and eating habits of bank employees. (n=32)**

Variable	Absolute frequency <i>n</i>	Relative frequency %
<b>Physical activity</b>		
Active	21	65.6%
Inactive	11	34.4%
<b>Exchange lunch for snacks</b>		
1 to 4/ week	14	43.8%
Rarely	18	56.3%
<b>Use of sweeteners</b>		
Yes	16	50.0%
No	16	50.0%
<b>Use of added salt</b>		
Yes	12	37.5%
No	20	62.5%
<b>Consumption of industrialized spices</b>		
Yes	17	53.1%
No	15	46.9%
<b>Daily meals</b>		
4 or less	21	65.6%
5 or more	11	34.4%
<b>Smoking</b>		
Yes	5	15.6%
No	27	84.4%

Most participants demonstrated healthy lifestyle and habits. Specifically, 65.6% were physically active, 56.3% rarely replaced lunch with snacks, 62.5% did not use added salt, and all (100%)

were non-smokers. Despite the good indicators recorded, some non-recommended habits were also demonstrated among participants. For instance, 53.1% consumed industrialized

spices and 50% used sweeteners in their meals. It was also observed that 65.6% of the participants had 4 or fewer meals per day.

Regarding food consumption, four food groups were evaluated, namely: bread and equivalents, fruits and vegetables, meat and equivalents, and finally oils/sauces. The data are represented in the table below.

The Most consumed food group was bread and its equivalents, with French bread being the most consumed within the group, followed by Brown rice. Foods such as biscuits with filling, sweet and savory, cake and sweet potatoes were not consumed daily by any of the participants.

**Table 2 - Frequency of consumption of foods from the bread group and equivalents.**

Bread and equivalents	Consumption Frequency													
	1/D	%	>2/D	%	1/S	%	2 to 4 /W	%	5 to 6 /W	%	1 to 3/M	%	R/N	%
Whole grain bread	9	28%	4	13%	4	13%	4	13%	-	-	-	-	11	34%
French bread	14	44%	5	16%	-	-	4	13%	9	28%	-	-	-	-
Polished rice	3	9%	9	28%	-	-	9	28%	11	4%	-	-	-	-
Brown rice	13	41%	-	-	6	19%	-	-	-	-	9	28%	4	13%
Noodle	2	6%	-	-	11	34%	7	22%	-	-	12	38%	-	-
Sweet potato	-	-	-	-	3	9%	4	13%	11	34%	14	44%	-	-
English potato	5	16%	1	3%	-	-	5	16%	8	25%	4	13%	9	28%
Cake	-	-	-	-	4	13%	14	44%	-	-	14	44%	-	-
Cracker	-	-	-	-	11	34%	-	-	-	-	12	38%	9	28%
Sweet biscuit	-	-	-	-	11	34%	4	13%	-	-	6	19%	11	34%
Biscuit without filling	-	-	-	-	4	13%	9	28%	-	-	8	25%	11	34%
Yam	4	13%	-	-	5	16%	4	13%	-	-	10	31%	9	28%
Biscuit with filling	-	-	-	-	9	28%	-	-	-	-	9	28%	5	16%
Bean	4	13%	9	28%	14	44%	4	13%	-	-	4	13%	-	-

D - Day; W - Week; M - Month; R/N - Rarely or Never

**Table 3 - Frequency of consumption of foods from the fruit and vegetable group.**

	Consumption Frequency													
	1/D	%	>2/W	%	1/ S	%	2 to 4 /W	%	5 to 6 /W	%	1 to 3/M	%	R/N	%
Lettuce	14	44%	4	13%	-	-	9	28%	-	-	1	3%	4	13%
Cabbage	1	3%	1	3%	4	13%	11	34%	-	-	4	13%	11	34%
Cress	3	9%	-	-	-	-	-	-	-	-	4	13%	25	78%
Cauliflower	-	-	-	-	1	3%	3	9%	-	-	14	44%	14	44%
Beet	1	3%	-	-	1	3%	8	25%	-	-	13	41%	9	28%
Carrot	4	13%	2%	6%	-	-	11	34%	15	47%	-	-	-	-
Cabbage	-	-	-	-	17	53%	-	-	7	22%	8	25%	-	-
Cucumber	10	31%	6	19%	2	6%	8	25%	5	16%	1	3%	-	-
Tomato	14	44%	4	13%	-	-	-	-	14	44%	-	-	-	-
Pumpkin	-	-	-	-	18	56%	-	0%	0	0%	5	16%	9	28%

D - Day; W - Week; M - Month; R/N - Rarely or Never

**Table 4 - Frequency of meats and equivalents.**

Meat and equivalents	Consumption Frequency													
	1/ D	%	>2/D	%	1/ W	%	2 to 4 /W	%	5 to 6 /W	%	1 to 3/M	%	R/ N	%
Fried egg	9	28%	-	-	4	13%	10	31%	9	28%	-	-	-	-
Boiled egg	8	25%	-	-	4	13%	7	22%	9	28%	-	-	4	13%
Beef	-	-	3	9%	4	13%	14	44%	-	-	11	34%	-	-
Pork	-	-	-	-	3	9%	-	-	-	-	9	28%	20	63%
Chicken	4	13%	9	28%	4	13%	11	34%	4	13%	-	-	-	-
Fresh fish	8	25%	3	9%	two	6%	15	47%	4	13%	-	-	-	-
Canned fish	4	13%	-	-	-	-	two	6%	-	-	16	50%	10	31%
Sausages	5	16%	-	-	4	13%	4	13%	-	-	10	31%	9	28%
Viscera	4	13%	-	-	7	22%	1	3%	-	-	11	34%	9	28%

D - Day; W - Week; M - Month; R/N - Rarely or Never

**Table 5 - Frequency of consumption of oils and sauces.**

Oils/Fat and Sauces	Consumption Frequency													
	1/D	%	>2/D	%	1/ W	%	2 to 4 /W	%	5 to 6 /W	%	1 to 3/M	%	R/N	%
Salad dressing	6	19%	4	13%	5	16%	4	13%	-	-	10	31%	3	9%
Butter	-	-	4	13%	9	28%	11	34%	3	9%	5	16%	-	-
Margarine	-	-	4	13%	6	19%	8	25%	4	13%	6	19%	4	13%
Mayonnaise	-	-	4	13%	4	13%	9	28%	4	13%	3	9%	8	25%

D - Day; W - Week; M - Month; R/N - Rarely or Never

In the fruit and vegetable group, lettuce was the most consumed item, accounting for 44% of participant's consumption. Cabbage and pumpkin

were however not consumed daily. Within the meat and equivalents group, fried egg was the most consumed (28%)

followed by boiled egg (25%), while beef and pork were not consumed.

## DISCUSSION

In this study, the majority of participants were found to be physically active, which corroborates with data from a similar study in Ghana<sup>9</sup>. This finding however contradicts studies on the food consumption which observed a low level of leisure-time physical activity (78.3%)<sup>10-13</sup>. In addition, a substantial number (84.4%) of participants in this study were non-smokers which is good because diseases like coronary artery disease and diabetes mellitus have been seen to be on a rise in developing countries like Mozambique and are a consequence of unhealthy diets and tobacco use<sup>15-21</sup>.

Contrary to a Brazilian study which found no associations between smoking and healthy eating habits consumption of fruits, vegetables, it is worth pointing out that NCDs kill<sup>22</sup>. They account for 41 million deaths each year, equivalent to 74% of all deaths globally. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million

including kidney disease deaths caused by diabetes). Tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets all increase the risk of dying from an NCDs<sup>23</sup> coupled with the COVID-19 pandemic, the risk of death from these conditions has increased dramatically<sup>24,25</sup>.

Regarding the practice of exchanging lunch for snacks, it was noted that the majority of participants did not engage in this behavior. This observation is similar to those made in the study by Cattafesta in Brazil<sup>4</sup>. The behavior is mainly observed due to the limited time for meals, due high workloads and the strenuous working hours<sup>26,27</sup>.

Regarding the use of sweeteners, 50% of participants reported using them. This may be associated with lack of information about healthy food choices or the preference of satisfying taste needs<sup>11</sup>. Additionally, 62.5% of participants stated that they rarely use added salt in their meals. This may be due to the knowledge of clinical complications and diseases caused by excessive consumption of salt. For example, this data corroborates the findings of a similar study in Portugal, which established that the proportion of individuals who reported adding salt to



many prepared foods was lower in hypertensive patients aware of their hypertension (PR = 0.60, 95%CI: 0.43, 0.85)<sup>28</sup>. This emphasizes once again the idea that knowledge influences consumption decisions<sup>29</sup>.

A curious fact was that in the same study<sup>28</sup>, it was noted that there was more frequent addition of salt among the more educated individuals (PR= 1.36, 95%CI: 1.18, 1.56) and it is always expected that this target group has more knowledge to the detriment of the less educated. This can be justified, because at some point customs and preferences dominate knowledge about what is healthier for consumption, as Oliveira et al<sup>30</sup> explains, behavior change is not an easy thing, it takes perseverance, determination, strategies and creativity to achieve because knowledge alone is just not enough.

Regarding food consumption, the study found that the most consumed within each food group were french bread in the bread and equivalents group, lettuce in the fruit and vegetable group, fried egg in the meats and equivalents group and salad sauce in the oils and sauces group. On the other hand, the least consumed foods included sweet potatoes and biscuits, cabbage and pumpkin, beef and pork, butter,

margarine, and mayonnaise, respectively. These findings are consistent with those of a study by Braga & Paternez in Brazil which evaluated food consumption of teachers at a private university in the city of São Paulo (SP)<sup>15</sup>.

Regarding rice consumption, brown rice was most consumed. This finding contradicts studies by Shawn et al<sup>17</sup> and Sebastião<sup>18</sup> which demonstrated less consumption of brown rice by study participants. It however corroborates findings by Cattafesta<sup>4</sup>, who observed a high consumption of brown rice among bank employees in Brazil, it is worth noting that brown rice is not very common in Mozambican culture compared to white rice<sup>19,20</sup>, factors such as awareness of the benefits of brown rice and the relative higher purchasing power of bank workers may account for this.

Additionally, studies have shown that brown rice although healthier is produced on a smaller scale hence may not be available in the markets, which can also reduce its consumption<sup>27</sup>. The process of converting brown rice to white rice involves polishing, resulting in a loss of nutrients such as vitamin B3 (up to 67% reduction), vitamin B1 (up to 80% reduction), vitamin B6 (up to 90%

reduction), manganese, phosphorus (almost half reduction), iron (up to 67% reduction), as well as essential fatty acids and dietary fibers<sup>31</sup>.

Although the present study did not investigate work relationships and their roles played, it is believed that the documented stress experienced by bank workers and caused by the imbalances in different aspects of their work, may also influence their food choices. This influence may be more evident in relation to gender and their workload<sup>32</sup>. In addition to this, research with 525 Brazilian bank employees revealed that being female and having adequate levels of HDL were protective factors against the hypertriglyceridemic waist phenotype (simultaneous presence of obesity and high serum triglycerides)<sup>33</sup>, which calls for further research to investigate whether this could be the case in Mozambique.

Limitations of this study include; the delay in the authorization of the bank branches for the study to commence, the restriction to directly administer the questionnaires during work hours and the restrictions of the Covid-19 pandemic which made it impossible to reach more bank branches as well as interview more employees.

## CONCLUSION

Most participants in this study demonstrated healthy lifestyle and eating habits, such as regular physical exercise, non-smoking, avoidance of substituting meals for snacks, limited use of added salt and consuming fruits and vegetables. However, some unhealthy habits were identified such as the consumption of industrialized spices and the use of sweeteners in meals, which may contribute to the development of Non-Transmissible Chronic diseases. Future research should include more banking agencies, in order to ensure greater representativeness of this target group.

## REFERENCES

1. Monteiro CA, Levy-Costa RB. Changes in the composition and nutritional adequacy of the family diet in metropolitan areas of Brazil. *Rev Public Health*. 2000; 34:251-8.
2. Araújo MPN, Costa-Souza J. The worker's diet in Brazil: a rescue of the national scientific production. *Hist ciênc saúde-Manguinhos*. 2022; 17(04):975-92.
3. Bourguignon D. Perfil epidemiológico de bancários do BANESTES. In: União

- de trabalhadores de estabelecimentos bancários do Espírito Santos. Vitória: Universidade Federal do Espírito Santo; 1997. p. 41-59.
4. Cattafesta M, Zandonade E, Bissoli NS, Salaroli LB. Eating patterns of bank workers and their association with socioeconomic, behavioral, and work factors. *Health Science*. 2019; 24(10):3909-22.
  5. Cattafesta M. Food consumption and associated factors: a study in bank workers. USP Bras; 2017.
  6. Shivaramakrishna HR, Wantamutte A, Sangolli HN, Mallapur MD. Risk factors of coronary heart disease among bank employees of Belgaum city - cross-sectional study. *J med sci*. 2010; 3(2):152-159.
  7. Eze NM, Maduabum FO, Onyeke NG, Anyaegunam NJ, Ayogu CA, Ezeanwu BA, et al. Awareness of food nutritive value and eating practices among Nigerian bank workers: Implications for nutritional counseling and education. *Medicine*. 2017; 96(10):e6283.
  8. Castro TGN, Mapelli LD, Gozzo T. Consentimento de participantes de pesquisa clínica. *J Health NPEPS*. 2023; 8(1):e10760.
  9. Addo PNO, Nyarko KM, Sackey SO, Akweongo P, Sarfo B. Prevalence of obesity and overweight and associated factors among financial institution workers in Accra Metropolis, Ghana: a cross sectional study. *BMC Res Notes*. 2015; 8(1):599.
  10. Alves ALS, Bombarda TM, Graeff DB, Bervian J, Doring M, Gonçalves CBC, et al. characteristics of food consumption of employees and professors at a community university. *Arq Health Science*. 2017; 24(4):42.
  11. Manavalan D, Shubrook C, Young CF. Consumption of Non-nutritive Sweeteners and Risk for Type 2 Diabetes: What Do We Know, and Not?. *Curr Diab Rep*. 2021; 21(12):53.
  12. Sulaiman SK, Kamalanathan P, Ibrahim AA, Nuhu JM. Musculoskeletal disorders, and associated disabilities among bank workers. *Int J Res Med Sci*. 2015; 3(5):1153-1158.
  13. Souza EV, Cunha CV, Oliveira BG, Bomfim EDS, Boery RNSO, Boery EN. Level of physical activity and quality of life of bank professionals. *Enferm Actual Costa Rica*. 2018; (36).
  14. Ashakiran DR. Fast food and their impact on health. *JKIMSU*. 2012; 1(2).

15. Braga MM, Paternez ACAC. Avaliação do consumo alimentar de professores de uma universidade particular da cidade de São Paulo (SP). *Rev Simbio-Logias*. 2011; 4(6):84-97.
16. Kock KS, Rupp OF. Efeito do estilo de vida e comorbidades nas internações por doenças do aparelho circulatório. *J Health NPEPS*. 2018 3(2):457-475.
17. Shaun MMA, Nizum MWR, Munny S, Fayeza F, Mali SK, Abid MT, et al. Eating habits and lifestyle changes among higher studies students post-lockdown in Bangladesh: A web-based cross-sectional study. *Heliyon*. 2021; 7(8):e07843.
18. Sebastião HM. Avaliação do consumo alimentar baseado na qualidade de vida de funcionários de uma empresa de fornecimento de energia. *Physics*. 2014; 46.
19. Carvalho CA, Fonsêca PCA, Nobre LN, Priore SE, Franceschini SCC. Metodologias de identificação de padrões alimentares a posteriori em crianças brasileiras: revisão sistemática. *Ciênc Saúde Coletiva*. 2016; 21(1):143-154.
20. Vaz SSD, Bennemann MR. Comportamento alimentar e hábito alimentar: uma revisão. 2014; 20(01):108-12.
21. Oliveira JD. Tabagismo e Aspectos Nutricionais. E-Book. 180 p.
22. Berto SJP, Carvalhaes MABL, Moura EC. Tabagismo, estado nutricional e hábitos alimentares em população adulta de município Paulista. *Rev Ciênc Ext*. 2011; 7(1):57.
23. World Health Organization. Noncommunicable diseases. 2022 [acesso em 2023 mar 29]. Disponível em: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
24. Gomes LC, Oliveira NC, Souza EA, Macedo MHS, Rodrigues ER. Incidência, mortalidade e letalidade por COVID-19 em município de Minas Gerais (2020-2021). *J Health NPEPS*. 2022; 7(2):e6314.
25. Nesello K, Costa JVD, Silva LCM, D'Moura MMI, Sacramento MS, Vivi-Oliveira VK, et al. Perfil epidemiológico, risco de agravamento e óbito por COVID-19 em cardiopatas no Brasil. *J Health NPEPS*. 2022; 7(1):e6250.
26. Prazeres HL, Vieira FST, Seabra CV, Almada MORV. Estado nutricional e consumo alimentar de produtores rurais em um

- assentamento de Minas Gerais. *J Health NPEPS*. 2022; 7(1):e6308.
27. Notícias ao Minuto. Arroz castanho, vermelho e preto fazem melhor? 2015 [acesso em 2023 mar 29]. Disponível em: <https://www.noticiasao minuto.com/lifestyle/470515/arroz-castanho-vermelho-e-preto-fazem-melhor>.
  28. Santos AF. Conhecimentos e comportamentos em relação ao consumo de sal em Moçambique [dissertação]. Porto: Universidade do Porto; 2017. 40 p.
  29. Vaz de Almeida C, Piber RS. Literacia em saúde: aspectos filosóficos, sociais e jurídicos. *J Health NPEPS*. 2022; 7(1):e6235.
  30. Oliveira EL, Riatto SG, Vieira APSB, Carvalho G, Fonseca M, Guedes V, et al. A importância do nível de conhecimento dos professores de escola pública do ensino fundamental sobre saúde bucal - revisão de literatura. *Rev Campo Saber*. 2018; 4(5).
  31. Zahra N, Jabeen S. Brown rice as useful nutritional source. *Pak J Agric Res*. 2020; 33(3):445-453.
  32. Muis M, Wahyu A, Mallapiang F, Darwis AM, Thamrin Y, Rezkiah N. The determinant of work stress on bank employees in Makassar, Indonesia. *Gaceta Sanitaria*. 2021; 35(2):S428-S431.
  33. Ferreira J, Oliveira R, Cattafesta M, Salarolli L. Hypertriglyceridemic Waist and Associated Factors: A Cross-Sectional Study of Bank Employees. *Curr Dev Nutr*. 2020; 4(2):nzaa061\_026.
  34. Piasecki P. The influence of employee membership on training intensity: The case of Polish co-operative banks. *J Co-oper Org Manage*. 2021; 9(2):100144.

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