

Intersectoral Forum to Fight NCDs in Brazil - ForumDCNTs' Recommendations to the World Health Organization (WHO) on the Updated Appendix 3 of the WHO Global NCD action plan 2013-2030.¹

The ForumDCNTs, since 2017, unites organizations from the different sectors dedicated to policies and programs on NCDs prevention and care. It was planned from its conception to assist the country in achieving the SDG 3.4 through SDG 17 (additional details [here](#)). Nowadays, over a hundred organizations from the public, private and not-for-profit/civil society sector join efforts in the key alliance for partnerships to fight NCDs that is the ForumDCNTs.

Regarding the web-based consultation for Member States, UN organizations, and non-State actors on Draft Updated Appendix 3 of the WHO Global NCD action plan 2013-2030 for the publication of its second draft WHO Discussion Paper containing a proposed updated Appendix 3 for a web-based consultation; including updated results on CHOICE analyses that WHO is convening from 1 to 28 August 2022, the ForumDCNTs supports the institutions that comprise it - especially the ones co-signing below - and share the following comments and recommendations.

Recommendation of Draft Updated Appendix 3 of the WHO Global NCD action plan 2013-2030

We congratulate the update of the list of interventions for 2022 in comparison with the 2017 update at the Appendix 3 of the WHO Global NCD action plan 2013-2030 in order to accelerate the achievement of SGD 3.4 on local terms (e.g. low, medium and middle-high income countries) and considering that's intended to provide information and guidance on effectiveness and cost-effectiveness of population-based and individual interventions based on current evidence, and to act as the basis for future work to develop and expand the evidence base. We have some general recommendation as listed below:

We emphasize that the pandemic has increased poverty and social inequality. In Brazil during the pandemic, 100 million people have some degree of food insecurity and 30.1 million are hungry.² Which worsened the condition of the NCDs. Therefore, much emphasis must be placed on poverty reduction, on integrated, intersectoral policies. Objective 1 is very welcome. We suggest greater emphasis on acting on social determinants in health and on health regulatory actions and policies.

We highlight the importance of:

- Raise public and political awareness, understanding and practice about prevention and control of NCDs;
- Integrate NCDs into the social and development agenda and poverty alleviation strategies;
- Strengthen international cooperation for resource mobilization, capacity-building, health workforce training and exchange of information on lessons learned and best practices.

For interventions in objective 3: To reduce modifiable risk factors for noncommunicable diseases and underlying social determinants through creation of health-promoting environments, we recommend:

In physical inactivity, it is important to strengthen the importance of the subject of physical education (PE) in the official educational curriculums of schools.^{3,4,5} Unfortunately, historically, there has been a reduction of time of practice at schools, including lack of space, and increased time for theory classes. As a consequence, the best time to engage children and adolescents to be more physically active adults is lost. Even in a recent publication in Brazil, the physical activity guide for the population, 150 minutes of moderate activity is recommended for adults and 75 minutes of vigorous activity per week for children, among other recommendations for different age groups during the life course.⁶ Active participation in physical education classes provides a beneficial effect on both physical and emotional development of students,⁷ and should be reinforced in this document.

At the same time, and in the same way, healthier food, mainly at the development of habits, as in toddlers, at school time, can make healthier adults. And WHO could be more direct on its recommendations regarding banishing trans fat acids in food delivered at public schools, and less salt, sugar and non-fresh foods.⁸ Helping countries like Brazil which has one of the highest consumption of trans fat in the world,⁹ and it is necessary, in terms of public health, that efforts are made to achieve the goals recommended by the WHO of banning its consumption by 2023.¹⁰

We also recommend that diagnosis and treatment of sleep disorders are incorporated to the Best Buys as a strategy to prevent NCDs, since evidence accumulate that they are very relevant risk factors for the development and worsening of several NCDs and leaving them untreated has an important burden on individuals, society, and a financial impact on health and economy of nations.

For interventions in objective 4: To strengthen and orient health systems to address the prevention and control of noncommunicable diseases and the underlying social determinants through people-centred primary health care and universal health coverage, we recommend:

Influenza vaccination for people with chronic obstructive pulmonary disease should be amplified to all people living with NCDs, according to recent studies there is an increase risk of severe influenza disease among adults with specific medical conditions as congestive heart failure (CHF), coronary artery disease (CAD), cerebral vascular accidents (CVAs), chronic obstructive pulmonary disease (COPD), asthma, Diabetes Mellitus (DM), and end-stage renal disease (ESRD).¹¹ Influenza vaccination is an effective measure in secondary prevention, as it reduces hospital admissions for heart failure, stroke and acute coronary syndrome, and reduces overall mortality.¹² In addition, it has well established the importance of Covid-19 vaccination on people living with chronic conditions.^{13, 14} All these facts could reduce the public health services demands, mainly at the seasonal time for viruses.¹⁵ These vaccines have already been made available in the Brazilian public health system (SUS) for all people living with NCDs.

Regarding vaccination against human papillomavirus (1-2 doses) of 9–14 year old girls, we would suggest to include “boys”, and emphasize the importance of this vaccination and extend the age limit for vaccination to 9 to 26 years. In Brazil, we already have boys 11-14 years old, men and women up to 45 years old living with HIV, transplant and other cancers in

the SUS. These recommendations amplify the range to those who didn't have the opportunity to make it, mainly in those countries which have low vaccination coverage".^{16.17.18}

We cordially acknowledge WHO's attention and the opportunity for this contribution, and put ourselves at its disposal to assist in global and regional recommendations, as well as to collaborate for their implementation in Brazil and abroad.

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Cited References:

1. WHO Discussion Paper (version dated 1 August 2022), Draft Updated Appendix 3 of the WHO Global NCD action plan 2013-2030.
2. 2º Inquérito Nacional sobre Insegurança Alimentar no Contexto da Pandemia da Covid-19 no Brasil.
<https://pesquisassan.net.br/2o-inquerito-nacional-sobre-inseguranca-alimentar-no-contexto-da-pandemia-da-covid-19-no-brasil/>
3. Hollis JL, Sutherland R, Williams AJ, Campbell E, Nathan N, Wolfenden L, Morgan PJ, Lubans DR, Gillham K, Wiggers J. A systematic review and meta-analysis of moderate-to-vigorous physical activity levels in secondary school physical education lessons. *Int J Behav Nutr Phys Act.* 2017 Apr 24;14(1):52. doi: 10.1186/s12966-017-0504-0. PMID: 28438171; PMCID: PMC5402678.
4. Zhou Y, Wang L. Correlates of Physical Activity of Students in Secondary School Physical Education: A Systematic Review of Literature. *Biomed Res Int.* 2019 Feb 19;2019:4563484. doi: 10.1155/2019/4563484. PMID: 30911543; PMCID: PMC6399562.
5. Tanaka C, Tanaka M, Tanaka S. Objectively evaluated physical activity and sedentary time in primary school children by gender, grade and types of physical education lessons. *BMC Public Health.* 2018 Aug 2;18(1):948. doi: 10.1186/s12889-018-5910-y. PMID: 30068319; PMCID: PMC6090761.
6. Umpierre D, Coelho-Ravagnani C, Cecília Tenório M, Andrade DR, Autran R, Barros MVG, Benedetti TRB, Cavalcante FVSA, Cyrino ES, Dumith SC, Florindo AA, Garcia LMT, Manta SW, Mielke GI, Ritti-Dias RM, Magalhães LL, Sandreschi PF, da Silva JRM, da Silva KS, Siqueira FCV, Hallal PC; Brazilian Physical Activity Guidelines Working Group*. Physical Activity Guidelines for the Brazilian Population: Recommendations Report. *J Phys Act Health.* 2022 May 1;19(5):374-381. doi: 10.1123/jpah.2021-0757. Epub 2022 Apr 13. PMID: 35418515.
7. Triaca LM, Frio GS, Aniceto França MT. A gender analysis of the impact of physical education on the mental health of Brazilian schoolchildren. *SSM Popul Health.* 2019;8:100419. <http://dx.doi.org/10.1016/j.ssmph.2019.100419> PMID:31198837.
8. Reformulation of food and beverage products for healthier diets: policy brief. Geneva: World Health Organization, 2022.
<https://www.who.int/publications/i/item/9789240039919>. Accessed 26 Aug 2022

9. Wanders AJ, Zock PL, Brouwer IA. Trans Fat Intake and Its Dietary Sources in General Populations Worldwide: A Systematic Review. *Nutrients*. 2017 Aug 5;9(8):840. doi: 10.3390/nu9080840. PMID: 28783062; PMCID: PMC5579633.
10. REPLACE trans fat: an action package to eliminate industrially produced trans-fatty acids. Geneva: World Health Organization; 2021 <https://www.who.int/publications/i/item/9789240021105> Accessed 20 Aug 2022.
11. Tiffany A Walker, Ben Waite, Mark G Thompson, Colin McArthur, Conroy Wong, Michael G Baker, Tim Wood, Jennifer Haubrock, Sally Roberts, Diane K Gross, Q Sue Huang, E Claire Newbern, Risk of Severe Influenza Among Adults With Chronic Medical Conditions, *The Journal of Infectious Diseases*, Volume 221, Issue 2, 15 January 2020, Pages 183–190, <https://doi.org/10.1093/infdis/jiz570>
12. Davis, M.M., Taubert, K., Benin, A.L., Brown, D.W., Mensah, G.A., Baddour, L.M. Dunbar, S. and Krumholz, H.M. (2006) Influenza Vaccination as Secondary Prevention for Cardiovascular Disease. A Science Advisory from the American Heart Association/American College of Cardiology. *Journal of the American College of Cardiology*, 48, 1498-1502. <http://dx.doi.org/10.1016/j.jacc.2006.09.004>
13. Martins WA, Oliveira GMM, Brandão AA, Mourilhe-Rocha R, Mesquita ET, Saraiva JFK, Bacal F, Lopes MACQ. Vaccinating Patients with Heart Disease Against COVID-19: The Reasons for Priority. *Arq Bras Cardiol*. 2021 Feb;116(2):213-218. English, Portuguese. doi: 10.36660/abc.20210012. PMID: 33656067; PMCID: PMC7909963.
14. COVID-19 advice for the public: getting vaccinated. Geneva: World Health Organization; 2022 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines/advice>) Accessed 24 Aug 2022.
15. Palache, A. , Tainijoki-Seyer, J. and Collins, T. (2014) The Link between Seasonal Influenza and NCDs: Strategies for Improving Vaccination Coverage. *Health*, 6, 2724-2735. doi: 10.4236/health.2014.619311.
16. Immunization coverage. Geneva: World Health Organization, 2022. <https://www.who.int/news-room/fact-sheets/detail/immunization-coverage>. Accessed 14 Aug 2022.
17. Silva TMRD, Nogueira de Sá ACMG, Beininger MA, Abreu MNS, Matozinhos FP, Sato APS, Vieira EWR. Impact of the COVID-19 Pandemic on Human Papillomavirus Vaccination in Brazil. *Int J Public Health*. 2022 Mar 31;67:1604224. doi: 10.3389/ijph.2022.1604224. PMID: 35431762; PMCID: PMC9008128.
18. Vaccination coverage in Brazil is low and heterogeneous, according to information from the PNI. Brazilian Society of Immunizations 2022. Portuguese. <https://sbim.org.br/noticias/1359-coberturas-vacinais-no-brasil-sao-baixas-e-heterogeneas-mostram-informacoes-do-pni>. Accessed 26 Aug 2022

Additional references:

Watson NF, Badr MS, Belenky G, Bliwise DL, Buxton OM, Buysse D, Dinges DF, Gangwisch J, Grandner MA, Kushida C, Malhotra RK, Martin JL, Patel SR, Quan SF, Tasali E. **Recommended amount of sleep for a healthy adult: a joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society.** *J Clin Sleep Med* 2015;11(6):591–592.

Paruthi S, Brooks LJ, D'Ambrosio C, Hall WA, Kotagal S, Lloyd RM, Malow BA, Maski K, Nichols C, Quan SF, Rosen CL, Troester MM, Wise MS. **Consensus statement of the American Academy of Sleep Medicine on the recommended amount of sleep for healthy children: methodology and discussion.** J Clin Sleep Med 2016;12(11):1549–1561.

Ferrari, G., Rezende, L.F.M., Florindo, A.A. et al. **School environment and physical activity in adolescents from São Paulo city.** Sci Rep 11, 18118 (2021). <https://doi.org/10.1038/s41598-021-97671-z>

Federici, C., Detzel, P., Petracca, F. et al. **The impact of food reformulation on nutrient intakes and health, a systematic review of modelling studies.** BMC Nutr 5, 2 (2019). <https://doi.org/10.1186/s40795-018-0263-6>

Franco-Arellano B, Arcand J, Kim MA, Schermel A, L'Abbé MR. **Progress towards eliminating industrially produced trans-fatty acids in the Canadian marketplace, 2013-2017.** Public Health Nutr. 2020 Sep;23(13):2257-2267. doi: 10.1017/S1368980019004816. Epub 2020 Jun 2. PMID: 32482203.

de Barros BV, Proença RPDC, Kliemann N, Hilleshein D, de Souza AA, Cembranel F, Bernardo GL, Uggioni PL, Fernandes AC. **Trans-Fat Labeling in Packaged Foods Sold in Brazil Before and After Changes in Regulatory Criteria for Trans-Fat-Free Claims on Food Labels.** Front Nutr. 2022 May 18;9:868341. doi: 10.3389/fnut.2022.868341. PMID: 35662949; PMCID: PMC9158744.

Malta DC, Szwarcwald CL, Barros MBA, Gomes CS, Machado ÍE, Souza Júnior PRB, Romero DE, Lima MG, Damacena GN, Pina MF, Freitas MIF, Werneck AO, Silva DRPD, Azevedo LO, Gracie R. **The COVID-19 Pandemic and changes in adult Brazilian lifestyles: a cross-sectional study,** 2020. Epidemiol Serv Saúde. 2020 Sep 25;29(4):e2020407. Portuguese, English. doi: 10.1590/S1679-49742020000400026. PMID: 32997069.

Ferreira APS, Szwarcwald CL, Damacena GN, Souza Júnior PRB. **Increasing trends in obesity prevalence from 2013 to 2019 and associated factors in Brazil.** Rev Bras Epidemiol. 2021 Dec 10;24(suppl 2):e210009. English, Portuguese. doi: 10.1590/1980-549720210009.supl.2. PMID: 34910063.

Malta DC, Bernal RTI, Lima MG, Silva AGD, Szwarcwald CL, Barros MBA. **Socioeconomic inequalities related to noncommunicable diseases and their limitations: National Health Survey, 2019.** Rev Bras Epidemiol. 2021 Dec 10;24(suppl 2):e210011. English, Portuguese. doi: 10.1590/1980-549720210011.supl.2. PMID: 34910065.

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