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## **Functional Finger Foods: a promising strategy to increase the proteins intake of older people**

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# Functional Finger Foods : a promising strategy to increase the proteins intake of older people

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Thanks a lot to 5 centers of care (79, Deux-S vres, France)

Le Sacr -C ur  
 Le Logis des Francs  
 Les Rives de S vres  
 La M nard re  
 Notre Dame de Puyraveau

## Why ?

**1** The population > 60 years is increasing

**2** Risk of undernutrition with age

**3** Undernutrition worsens the frailty<sup>(1)</sup>

**4** Sarcopenia is an hallmark of undernutrition<sup>(2)</sup>

**5** Gap between theory and reality<sup>(3,4)</sup>

Aged people	Proteins (g/kg/jour)
Recommended intake	1-1.2
Mean of real intake	~0.8

## How ?

**1** Finger Food

Attractive, Rich in protein, Easy to use, Easy to grab

**2** Qualitative evaluation<sup>(5)</sup>

**3** Quantitative evaluation<sup>(5)</sup>

Care staff, 2 deliveries / day, 20 finger food / day, 2 flavours/day

Distribution in 5 centers of care

1

2

3

4

5

6

7

126 sheets, n=60, 15 days

## Results

**1** Liking or not?

Number of people : n=120

**2** Consumption

% of people (n=60)

Number of finger food per days

**3** Parameter impacting the consumption

The % of completed lines reflects the motivation of the team

## Messages

- 1** Good adhesion to eat finger food
- 2** Better consumption with a motivated team of care
- 3** Consumption : 6-10 finger food/days

## After ?

+ Multimodal strategy<sup>(6)</sup> + Probiotic<sup>(7,8)</sup>

## References

<sup>1</sup> Saint-Criq V, Lugo-Villarino G, Thomas M. Dysbiosis, Malnutrition and enhanced gut-lung axis contribute to age-related respiratory diseases. Ageing Res Rev. 2021 Mar;66:101235.  
<sup>2</sup> Ruiz JR, Sui X, Lobelo F, Morrow JR Jr, Jackson AW, Sj str m M, Blair SN. Association between muscular strength and mortality in men: prospective cohort study. BMJ. 2008 Jul 1;337(7661):a439.  
<sup>3</sup> Experts PA Protein Intake: Dietary Intake, Quality, Requirements and Recommendations. ANSES reports. [https://www.anses.fr/fr/system/files/NUT-Sy-ProteinesEN.\(2007\)](https://www.anses.fr/fr/system/files/NUT-Sy-ProteinesEN.(2007))  
<sup>4</sup> Dardevet D, Mosoni L, Savary-Auzeloux I, Peyron MA, Polakof S, R mond D. Important determinants to take into account to optimize protein nutrition in the elderly: solutions to a complex equation. Proc Nutr Soc. 2021 May;80(2):207-220.  
<sup>5</sup> Sulmont-Ross  C, Symoneaux R, Feyen V, Ma tre I. Improving food sensory quality with and for elderly consumers. Methods in Consumer Research. Volume 2: Alternative Approaches and Special Applications. 1st Edition, Elsevier, 478 p., 2018. ffaal-02791415  
<sup>6</sup> Agostini, D.; Gervasi, M.; Ferrini, F.; Bartolacci, A.; Stranieri, A.; Piccoli, G.; Barbieri, E.; Sestili, P.; Patti, A.; Stocchi, V.; et al. An Integrated Approach to Skeletal Muscle Health in Aging. Nutrients 2023, 15, 1802. <https://doi.org/10.3390/nu15081802>  
<sup>7</sup> Giron M, Thomas M, Jarzaguet M, Mayeur C, Ferrere G, Noordine ML, Bornes S, Dardevet D, Chassard C, Savary-Auzeloux I. Lactiseibacillus casei CNCM I-5663 supplementation maintained muscle mass in a model of frail rodents. Front Nutr. 2022 Aug 10;9:928798. doi: 10.3389/fnut.2022.928798.  
<sup>8</sup> Giron M, Thomas M, Dardevet D, Chassard C, Savary-Auzeloux I. Gut microbes and muscle function: can probiotics make our muscles stronger? J Cachexia Sarcopenia Muscle. 2022 Jun;13(3):1460-1476.