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MARitime Soft Skills for Onboard Healthy Nutrition and CULinary Arts in Seagoing Services – CUL-MAR-Skills

NUTRITION AS THE BASIS FOR A HEALTHY AND PRODUCTIVE WORK LIFE ONBOARD:

FACTS AND INSIGHTS FROM DIFFERENT PERSPECTIVES

ASSOC.PROF. PINAR OZDEMIR----PIRI REIS UNIVERSITY

PROF. TANER ALBAYRAK --- PIRI REIS UNIVERSITY

ASSOC. PROF. CATALIN POPA --- ROMANIAN NAVAL ACADEMY

SIGA2 Conference 2025

7-9 May 2025

ANTWERP/BELGIUM

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NUTRITION ONBOARD

Research on:

- ✓ • The importance of learning about the dietary patterns of seafarers
- ✓ • Potential consequences of poor nutrition on the health and well-being of seafarers
- ✓ • The relationship between the nutrition of seafarers with certain diseases



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NUTRITION ONBOARD

Results:

Unhealthy eating habits and dietary intakes in maritime settings

- ✓ lead to metabolic syndrome and cardiovascular diseases
- ✓ Increases stress.





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NUTRITION ONBOARD

Conscious eating habits can lead to an increase in

- ✓ both individual and sectoral productivity,
- ✓ sustainability,
- ✓ quality of life,
- ✓ healthy life and well-being





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NUTRITION ONBOARD

Importance of good nutrition for seafarers

- ✓ The International Labor Organization (ILO) provided comprehensive guidance on ensuring seafarers' health and medical care.
 - ✓ Maritime Labour Convention





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NUTRITION ONBOARD

A new, innovative, and joint curriculum to provide the participants with sound education and training based on three pillars.

- To promote healthy nutrition on board
- To provide basic education for the victualling services and food logistics on board the ships,
- To educate students on culinary arts, which covers activities to give them cooking skills with an emphasis on marine cuisine.





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CUL-MAR Skills Project

MARitime Soft Skills for Onboard Healthy Nutrition and CULinary Arts in Seagoing Services

PIRI REIS UNIVERSITY - PRU (TURKIYE)

MIRCEA CEL BATRAN NAVAL ACADEMY - RNA (ROMANIA)

NIKOLAY VAPTSAROV NAVAL ACADEMY - NVNA (BULGARIA)

UNIVERSITY OF THE AEGEAN - UAEGEAN(GREECE)

THE CONFERENCE of PERIPHERAL MARITIME REGIONS - CPMR
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PROJECT RESULTS

1 research survey and 1 follow up report
5 training modules (1 WP2, 3 WP3, 1 WP4):

- Onboard Healthy Nutrition
- Supply Chain Management and the Victualling Services Onboard
- Entrepreneurial Opportunities in Seagoing Procurement Services
- Sustainable Development and the Green Transition to Effective Galleys Services Onboard the Ships
- Onboard Cook Skills

1 Cook Manual for Seafaring Cuisine Services Onboard the Ships

PROJECT PARTNERS



 <https://www.anmb.ro/cul-mar-skills/>

 erasmus@anmb.ro

 <https://marplat.eu>

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CUL-MAR Skills Project

By carrying out these stages, the project will enable students:

- ✓ build competence by taking the necessary steps to become an expert
- ✓ have an insight into the importance of sustainability
- ✓ appreciate the significance of hygiene and sanitation
- ✓ acquire knowledge about food storage
- ✓ recognize the importance of developments in nutrition and health
- ✓ take the first steps towards having an entrepreneurial mindset.



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CUL-MAR Skills Project

The Courses to be developed within the frame of the project

- ✓ Onboard Healthy Nutrition
- ✓ Victualling Onboard
- ✓ Entrepreneurial Opportunities And Procurement
- ✓ Green Transition In Blue Galleys
- ✓ Onboard Cooking Skills





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Methodology

Surveys (5 languages – 3 domains)

- Students and seafarers
- Galley staff
- Employers





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CUL-MAR Skills Project

SEAFARERS and STUDENTS





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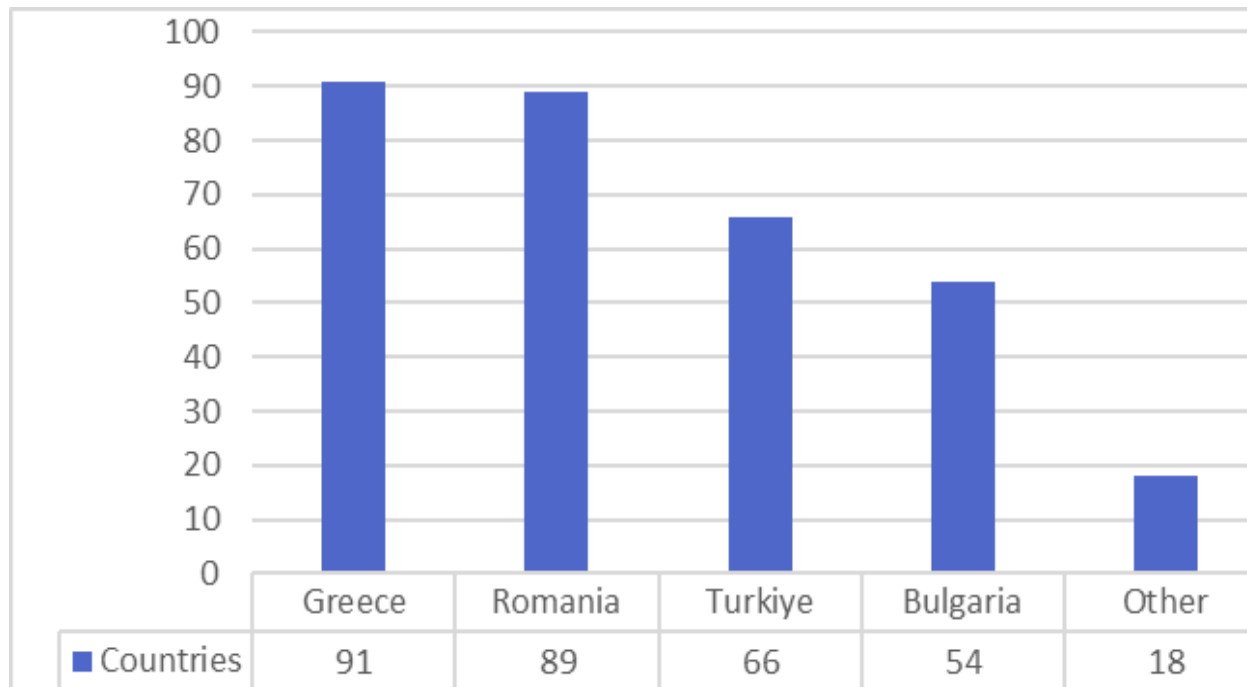


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CUL-MAR Skills Project -Participants

321 participants, 174 students, and 147 seafarers





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CUL-MAR Skills Project - Results

- ✓ Do not eat enough whole meal/bread/cereals/pasta,
- ✓ Eat less fresh fruit and vegetables than recommended, which means they are likely to suffer from a lack of vitamin A- B2-B5-B11, C-E-K11,
- ✓ do not eat eggs as much as they need,
- ✓ 85 % of them do not have a daily intake of seeds and nuts, which contain B8 and E vitamins.





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CUL-MAR Skills Project - Results

Do not eat enough legumes, which are extremely healthy foods because they do not contain cholesterol and are very low in saturated fat.



Only 30% drink 6-8 glasses of water daily, which is the recommended amount. 25 % drink more, but 45 % drink less.





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CUL-MAR Skills Project - Results

64.2% of seafarers eat dairy products daily



62% of seafarers eat fish weekly.





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Participants' responses to the statements related to eating habits and awareness

Please specify how much you agree with the following statements.	Strongly Disagree n-%	Disagree n-%	Neither Disagree nor Agree n-%	Agree n%-	Strongly Agree n-%
a. I eat plenty of fresh fruit and green leafy vegetables	15 % 4.7	29 % 9	89 % 27.2	119 % 37.1	15 % 4.7
b. I follow a balanced diet	16 % 5	50 % 15.6	107 % 33.3	126 % 39.3	22 % 6.9
c. I know what to eat to maintain my health on board	12 % 3.7	21 % 6.5	61 % 19	167 % 52	60 % 18.7
d. I eat a lot of bread because I can't get enough food during the meal service	69 % 21.5	120 % 37.4	65 % 20.2	53 % 16.5	14 % 4.4
e. I try to do simple workouts when on board to keep in good health	20 % 6.2	44 % 13.7	63 % 19.6	141 % 43.9	53 % 16.5



Participants' responses to the statements related to eating habits and awareness

Please specify how much you agree with the following statements.	Strongly Disagree n-%	Disagree n-%	Neither Disagree nor Agree n-%	Agree n-%	Strongly Agree n-%
f. When planning the menu, I believe the goal is to achieve a balanced diet while ensuring satiety	10 %3.1	19 %5.9	77 %24	149 %46.4	66 %20.6
g. Being aware of having a nice meal at the end of the day increases my work motivation	---	10 %3.1	39 %12.1	120 %37.4	152 %47.4
h. I am satisfied with the current provision of healthy and nutritious food onboard.	15 %4.7	44 %13.7	101 %31.5	122 %38	44 %13.7
j. I can eat healthy food when I want to.	18 -% 5.6	17- % 5.3	102-% 31.8	91- % 28.3	93- % 29



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CUL-MAR Skills Project - Results

- ✓ 41.8 % of the participants are conscious about how to eat healthily,
- ✓ 46.2% of them say they follow a balanced diet,
- ✓ 84.4% of the respondents stressed the importance of good food for motivation and high morale,
- ✓ 51.7% said they were satisfied with the current provision of healthy and nutritious food onboard.
- ✓ 42% said it may not be possible to get healthy food, even if they want to.



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GALLEY STAFF





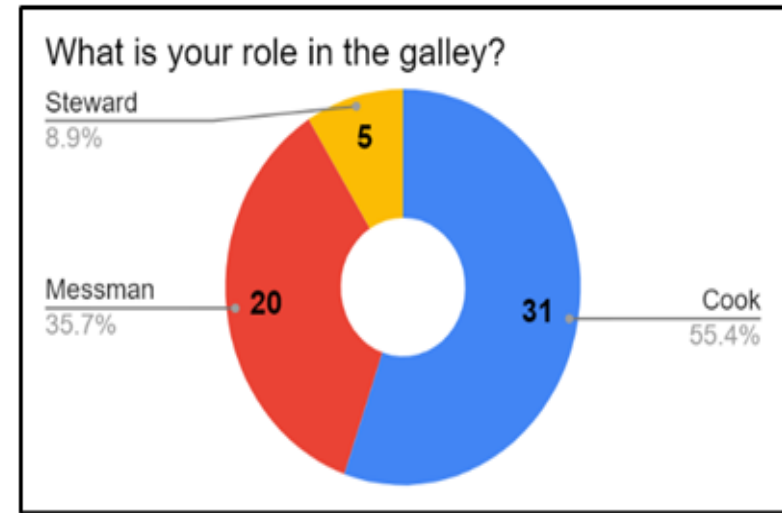
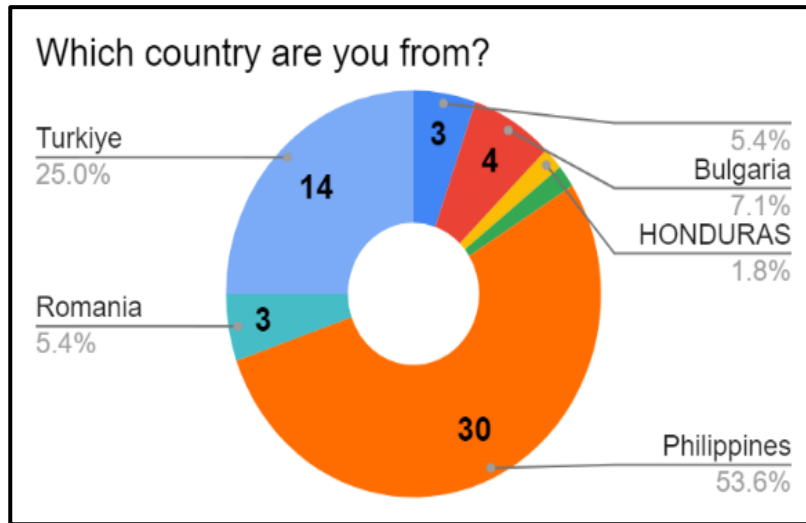
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CUL-MAR Skills Project -Participants



56 participants; 31 cooks, 20 messman, 5 stewards



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Attitudes of the galley staff on nutrition onboard

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I know what to cook to maintain good health while on board.	% 1.5	% 3.5	% 5	% 36	% 54
I can prepare a balanced menu.	% 4	-	% 9	% 39	% 48
When planning the menu, I believe the goal is to achieve a balanced diet while ensuring satiety.	% 2	-	% 7	% 34	% 57
Having a nice meal at the end of the day increases the crew's motivation.	% 4	-	-	% 30	% 66



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CUL-MAR Skills Project - Results

- ✓ 90 % of the galley staff say they know what to cook to keep seafarers healthy.
- ✓ 91% know how to prepare a balanced diet.
- ✓ 96% believe nice food increases motivation.





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CUL-MAR Skills Project - Results

Tasty food:

- ✓ creates a feeling of comfort, enjoyment, and camaraderie,
- ✓ contributes to the physical well-being of individuals on board,
- ✓ affects mental health by improving mood, cognitive function, and general well-being,
- ✓ makes seafarers more alert, focused, and productive,
- ✓ plays a vital role in optimizing performance and productivity.



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Responses to the statements about the cooking behaviours of the galley staff

Thinking about your cooking skills, how often do you... (%)	Never	Rarely	Sometimes	Often	Always
Cook dishes from different cultures?	-	% 18	% 4	% 21	% 57
Adjust the menu as required by weather and sea conditions?	-	-	% 32	% 27	% 41
Know how many calories each menu should have?	% 5	% 4	% 13	% 32	% 46



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CUL-MAR Skills Project - Results

- ✓ 78,5% of the galley staff are aware of the need to cook food from different cultures and they can cook them,
- ✓ 66,9% of them are flexible enough to adjust the menu to the needs of the conditions onboard,
- ✓ 25% of them still need to get training regarding this section, while the others learn more recipes from various cultures and how food from quite different cultures can be integrated to have a better combination regarding the menu on board.



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CUL-MAR Skills Project - Results

- ✓ 78.5% of the participants consider themselves conscious and well-informed about this issue.
- ✓ 12.5% stated that they were unsure about these values,
- ✓ 9% stated that they knew little or nothing about them.

solid training & refreshing and updating trainings





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EMPLOYERS





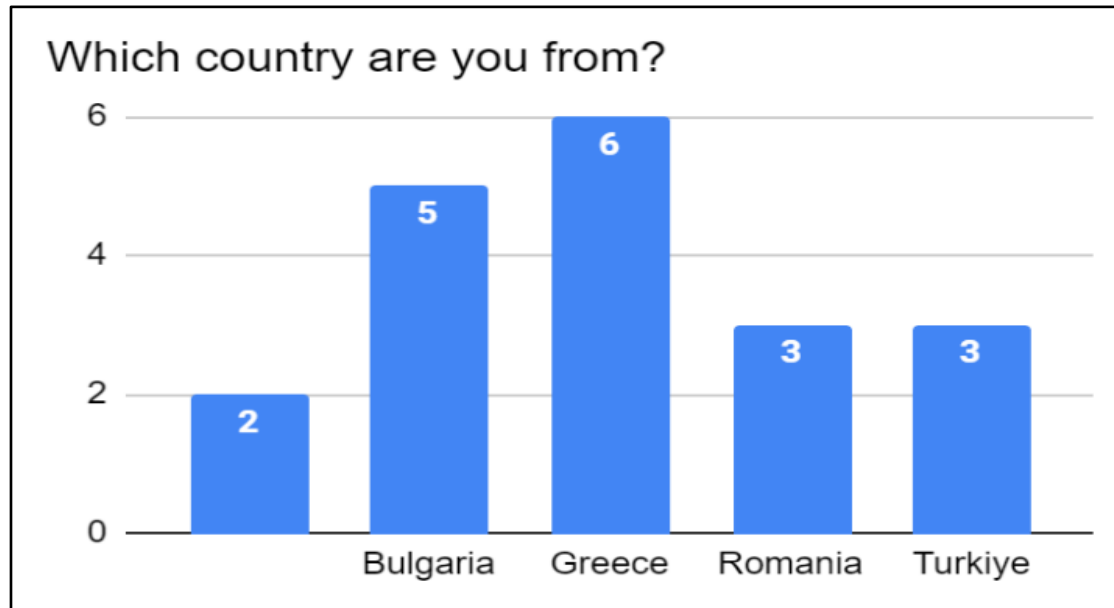
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CUL-MAR Skills Project -Participants



19 employers participated in the survey



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Opinions of the employers on cooking practices onboard (%)

Please specify how much you agree with the following statements regarding cooking practices:	Strongly disagree %	Disagree %	Neutral %	Agree %	Strongly agree %
a. We are aware of nutritious diets to ensure seafarers' healthy nutrition.			5	53	42
b. The menu is prepared to meet seafarers' daily energy requirements.			6	38	56
c. We ensure that seafarers are both well-nourished and healthy to fulfill their duties		1		31	63
d. It is important to purchase quality food for the galley		1		18	75
e. We ensure the adequacy of water and food supplies for everyone on board.				25	75



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Opinions of the employers on cooking practices onboard (%)

Please specify how much you agree with the following statements regarding cooking practices:	Strongly disagree %	Disagree %	Neutral %	Agree %	Strongly agree %
f. We pay attention to the quality of the water and food on board				25	75
g. The nutritional value of the water and food on board is important		6		31	63
h. We are aware of the crew's food allergies			6	50	44
i. We are aware of diseases caused by malnutrition		6	6	63	25
j. We consider offering a good menu as a motivational tool			6	31	63
l. Crew and staff are allowed to eat whatever they like 24 hours a day	6	25	25	25	19



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CUL-MAR Skills Project - Results

- ✓ 95 % nutritious diets are crucial for seafarers' health and that the menu is prepared to meet the seafarers' energy needs.
- ✓ 93 % the quality of the food is as important as its quantity,
- ✓ 94 % know good food is the key to the motivation, success, and productive work of the crew.
- ✓ %89,4 of the employers are aware of the diseases caused by malnutrition,
- ✓ 94.8% of them consider offering a good menu as a motivational tool.



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Opinions of the employers on equity and diversity

Please specify how much you agree with the following statements	Strongly disagree %	Disagree %	Neutral %	Agree %	Strongly agree %
a. We ensure that meals that are part of the culture of the ship's personnel are also prepared		6	6	57	31
b. We ensure that meals that are special on national/religious days for personnel belonging to different nationalities are prepared on these days.				62	38
c. Special conditions of crew members, such as eating gluten-free, being allergic to certain foods, or being vegetarian, are considered		12	12	38	38
d. We ensure a representative proportion of women in the galley staff.	6	20	25	44	6
e. We consider the innovative and entrepreneurial ideas of the galley staff and implement them if possible.		13	6	56	25



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CUL-MAR Skills Project - Results

- ✓ 88 % meals representing the culture of the seafarers should be included in the menu.
- ✓ 100 % important days or events for the seafarers, and they tend to prepare the menu to celebrate them,
- ✓ 76 % consider special conditions of crew members, such as eating gluten-free, being allergic to certain foods, or being vegetarian,
- ✓ Only 50% support women to work in the galleys,
- ✓ 79 % support innovative and entrepreneurial ideas of the galley staff; strangely enough, 21 % of them indicated they were against these ideas.



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CUL-MAR Skills Project - Results

- ✓ **The overall satisfaction of crew members with the food services are measured by:**
- ✓ Regular surveys and feedback mechanisms
- ✓ Informal feedback channels (direct communication with crew members)
- ✓ Observation and assessment by onboard management





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CUL-MAR Skills Project - Conclusions

- ✓ urgent need for systemic changes in education, food access, and meal planning on board.
- ✓ have a basic understanding of balanced nutrition,
- ✓ need for essential dietary guidelines, especially when it comes to consuming enough fruits, vegetables, fiber, and vital nutrients.
- ✓ dissatisfaction among seafarers regarding current food provisions



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CUL-MAR Skills Project - Conclusions

- ✓ structured nutritional education, ongoing training for galley staff, and regular updates to menu planning,
- ✓ healthy, culturally appropriate, and high-quality meals become the norm on board.





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CUL-MAR Skills Project - Conclusions

- ✓ Innovations in food services—like AI-driven meal planning, smart provisioning systems, and advanced food preservation techniques,
- ✓ Promoting diversity among galley personnel ,
- ✓ establishing consistent feedback mechanisms,
- ✓ fostering supportive environments for innovation,
- ✓ considering cultural aspects in meal preparation,
- ✓ make significant strides in seafarers' health, job satisfaction, and operational efficiency.



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CUL-MAR Skills Project - Conclusions

significant strides in seafarers' health, job satisfaction, and operational efficiency.



Piri Reis University, Cookery Department Students in their "Practice Galley"



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Thank you for your kind attention!