INTRODUCTION:
Primary and secondary prevention of skin cancer vary considerably from one country to another. This survey investigates knowledge and behaviors regarding sun exposure in Europe compared to other continents such as North and South America, Africa, Oceania and Asia.

METHODS:
This European survey among Germany, France, Spain, Italy, United Kingdom and Russia (N= 6,000) was conducted online from 28 September-18 October 2021 and was part of a broader worldwide survey (N=17,001) conducted in 17 countries (5 continents). Automated selection from the Ipsos online Panel ensured samples of 1,000 individuals in each country fit the quotas method based on gender, age, employment status, and country regions. Data covered demographics, phototype, exposure habits and practices, knowledge and understanding of risks. "At-risk" sub-population was defined as individuals with a history of melanoma/non melanoma skin cancer, pre-cancerous lesions, photodermatosis, or currently on photosensitive or immunosuppressive drugs.

RESULTS:
The European population comprised 48% men, average age was 47.5 years (SD:15.8) and 54% were of phototype I-2. Non-Europeans countries in comparison were less represented in phototype I-2 (43%). 82% of Europeans stated that a tanned skin looks attractive vs 67% outside of Europe. And 73% of Europeans indicated that a tan makes a healthy look, a different perception in non-EU countries (59%). However, 92% of Europeans were aware of sun-related skin-health issues, a lower awareness out of Europe (86%). Similarly, Europeans were more aware of the skin aging risk (86%) vs non-EU countries (79%). But only 56% of Europeans did know that sun protection is useful when the weather is overcast, a lower knowledge vs non-EU countries (64%). Moreover, 24% of Europeans indicated it was safe to go out without protection when already tanned vs 21% outside of Europe.

In terms of photoprotection, 16% of Europeans said they protected all year round, vs 27% out of Europe. Only 10% of Europeans systematically/often use all protections measures during exposure vs 14% out of Europe. In detail, Europeans were less likely to systematically/often wear a hat/cap (51% in Europe vs 57% out of Europe), wear protective clothes (33% vs 51%) or stay in the shade (73% vs 80%). On the other hand, Europeans were more likely to systematically/often put sunscreen especially on arms, legs and chest (62%) compared to non-Europeans (52%). More generally, 10% of Europeans said they never used sunscreen compared to 16% outside of Europe. During sun exposure, among those who applied sunscreen, 34% of Europeans applied only once a day, this low frequency habit reached 49% out of Europe. 47% of Europeans regretted not having previously used better protection in Europe. In terms of knowledge, 74% of Europeans did not understand the difference between UVA and UVB vs 69% out of Europe.

At-risk Europeans individuals (11%, n=655) had better knowledge and photoprotection habits than the overall European population; but only 21% systematically/often used all the protection measures during sun exposure and still 58% felt they did not understand the difference between UVA and UVB.

CONCLUSION:
Europeans are more likely to perceive the benefits of the sun and tanning appeal. Sun-protection practice appears more inadequate in Europe compared to other continents. This survey provides insights into the need for additional photoprotection education.