Characterising the diet of people living with psoriasis and determining diet-related risk of comorbidities using the UK Biobank: The Diet Study in Psoriasis-UK (DiSP-UK) Study

End of grant term lay summary

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Overview

The Diet Study in Psoriasis-UK (DiSP-UK) study focuses on understanding how the diets of people with psoriasis in the UK may be related to their risk of developing psoriasis-related health conditions and more severe psoriasis. Psoriasis can impact the overall quality of life and has been linked to an increased chance of having other chronic diseases such as type 2 diabetes and cardiovascular disease. Current care for psoriasis in the UK does not include dietary guidance, mainly due to a lack of robust evidence. This study explores the potential role of diet in the management of psoriasis and its related health risks.

Study Details

Using data from the UK Biobank, which includes over 500,000 people living in the UK, the study identified nearly 11,000 individuals with psoriasis. Researchers compared their dietary intakes with those of other participants without psoriasis and explored the relationship between diet and health outcomes. Participants' diets were assessed using food frequency questionnaire, which assessed how often different types of food were eaten, and 24-hour dietary recalls that provide a more detailed snapshot of foods eaten over the previous day. This information was used to evaluate their adherence to the UK Eatwell Guide and recommended healthy dietary patterns like the Mediterranean-style diet. Statistical methods were then applied to analyse the relationship between diet and psoriasis-related health conditions and severity, while considering various influencing factors.

Key Findings

Both groups, those with and without psoriasis, had a similar diet quality. For those with psoriasis, better adherence to a healthy diet was linked to lower risks of certain cardiometabolic diseases, such as heart attack, and to more favourable blood cholesterol profiles. An unexpected finding was that higher quality diets were associated with a slightly increased risk of osteoporosis (weakened bones), and we believe that this finding requires further exploration. Participants with more severe psoriasis, indicated by the level of treatment they were on, tended to have less healthy diets, particularly lower fruit, vegetable, and nut intakes. The study also highlighted that frequent consumption of processed meats (like bacon, ham and sausages) was associated with higher risks of conditions like high blood pressure and chronic kidney disease, and higher blood pressure, blood sugars, and cholesterol in participants living with psoriasis, indicating potential areas for dietary intervention.

Conclusion

The findings suggest that a healthy diet is linked with a reduced risk of certain cardiometabolic diseases in people with psoriasis. Eating more fruits and vegetables and nuts is linked with having a less severe psoriasis. These findings emphasise the importance of dietary management for people living with psoriasis. Further research is needed to better understand how improving diets may be beneficial in managing psoriasis. This research has the potential to inform dietary guidelines that could enhance the management and overall health outcomes for individuals living with psoriasis.