



Arthritis Talks: The Vital Role of Nutrition in Arthritis Management

Dr. Lihi Eder, Rheumatologist and Arlaina Waisman, Registered Dietitian

September 27, 2023

Presenters



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(Moderator)



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Webinar tips

- Use the **Q&A** section to ask the presenters your questions. Some of the questions will be chosen for the live question period at the end of the webinar.
- Click on the **Chat** box to connect with other participants and the Arthritis Society's chat moderator.
- If you have further issues, email arthritistalks@arthritis.ca

The screenshot shows the Arthritis Society Canada webinar interface. At the top center is the Arthritis Society Canada logo. Below the logo are two buttons: 'Q&A' and 'Chat'. At the bottom left is an 'Audio Settings' button. At the bottom right is a red 'Leave' button. A yellow callout box at the top right points to a red icon in the top right corner of the interface, with the text 'Click on the red icon to exit out of the Q&A or Chat'. A yellow callout box at the bottom left points to the 'Audio Settings' button, with the text 'Click here to access your audio settings'. A yellow callout box at the bottom right points to the 'Chat' button, with the text 'Click here to chat or to submit a question'. On the right side, a 'Q&A' window is open, displaying a 'Welcome to Q&A' message and a text input field labeled 'Type your question here...'.

Overview

[1]

How diet can affect arthritis



[2]

Current research



[3]

Questions



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Q

Is there a specific diet people living with arthritis should follow?



What and how you eat can make a difference!

- ▼ Nutrition related research in the past was often not well designed or controlled.
- ▼ Some past research got things wrong. Low fat diets are not necessarily the answer!
- ▼ In addition, there are strong food lobbies in North America which have influenced messaging around food and eating that perhaps have not been good for the health of the people.
- ▼ Until recently, there has been a lack of research focused on diet and arthritis.



What is an Anti-Inflammatory Diet?

- ▼ A way of eating
- ▼ Emphasizing more foods known for lowering inflammation
- ▼ Limiting foods that are considered pro-inflammatory
- ▼ Diets that are considered the best are The Mediterranean Diet, Dash Diet, Flexitarian Diet and the Mind Diet



<https://health.usnews.com/best-diet/best-diets-overall>

What to Eat?

- ▼ Emphasize fresh foods
- ▼ Vegetables and fruit at most meals (especially leafy greens, berries...)
- ▼ More plant-based proteins such as legumes, nuts, seeds, tofu ...
- ▼ Fatty fish at least twice per week
- ▼ Good fats such as EVOO, avocado oil, nut and seed oils
- ▼ Lower fat dairy emphasizing more yogurt
- ▼ Whole grains
- ▼ Herbs and spices

Caution if you have kidney disease



What to limit?

Foods considered pro-inflammatory:

- ▼ Large quantities of meat and poultry
- ▼ High fat dairy: high fat cheeses, cream, butter, high fat yogurt/yogurt drinks
- ▼ Hard margarines
- ▼ Lard
- ▼ Highly processed foods
- ▼ Packaged foods low in fibre or considered refined
- ▼ Processed meats
- ▼ Sugar and foods high in sugar
- ▼ Deep fried foods



FOODS THAT FIGHT INFLAMMATION

Chronic inflammation has been linked to cancer, heart disease, diabetes, arthritis, depression, and Alzheimer's. Fight inflammation with a healthy diet.



ANTI-INFLAMMATION FOODS



Tomatoes



Fruits

Strawberries, blueberries, oranges and cherries.



Nuts

Almonds, walnuts, and other nuts.



Olive oil



Leafy greens

Spinach, kale, collards, and more.



Fatty fish

Salmon, mackerel, tuna, and sardines.

INFLAMMATION FOODS



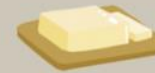
Fried foods



Sodas



Refined carbs



Lard



Processed meats

Image: (*Foods That Fight Inflammation*, 2020)

Anti-inflammatory powerhouses

- ▶ Vegetables and fruit (packed with antioxidants, nutrients and fibre), especially leafy greens, berries, tomatoes and cruciferous vegetables
- ▶ High fibre grains
- ▶ High fibre proteins
- ▶ Proteins high in omega 3 fats, and low in saturated fats (fatty fish, nuts, seeds, beans, legumes)
- ▶ Good fats (olives, avocados, nuts, seeds, and their oils)
- ▶ Foods high in probiotics and prebiotics
- ▶ Foods that are considered high in antioxidants
- ▶ How to fit alcohol in
- ▶ Healthy sweets

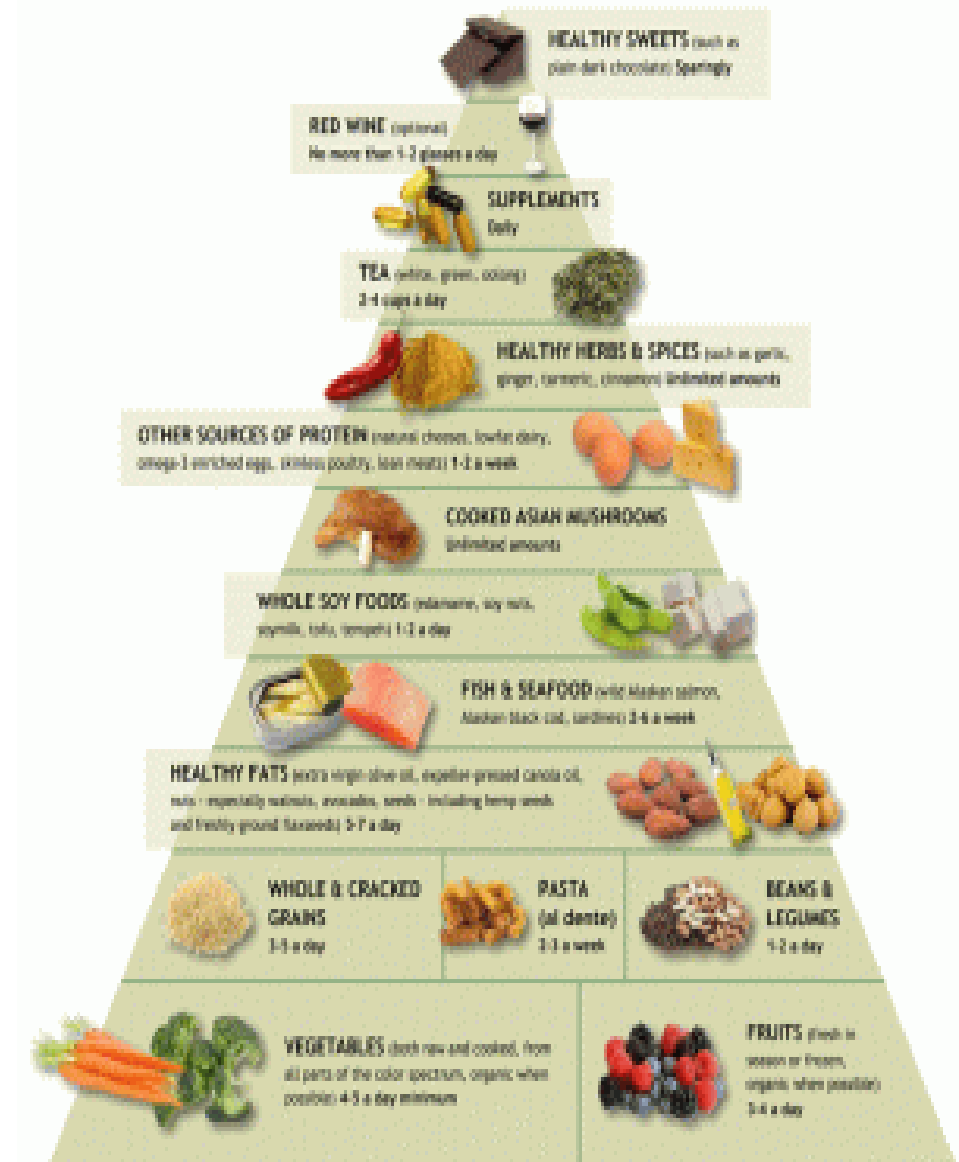


Image: (Weil, 2009)

Rondanelli, M et al. Ideal food pyramid for patients with rheumatoid arthritis:
 A narrative. Clinical Nutrition. <https://doi.org/10.1016/j.clnu.2020.08.020>



Canada's
food guide

Eat well. Live well.

Eat a variety of healthy foods each day

Have plenty
of vegetables
and fruits

Eat protein
foods

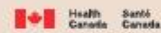
Make water
your drink
of choice

Choose
whole grain
foods

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Wellness: A Guide to Living Well. © 2011. All rights reserved. / © 2011. Tous droits réservés. / No. 1000000000000000

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Canada

www.Canada.ca/FoodGuide



Healthy eating recommendations



Healthy eating is more than the foods you eat. It is also about where, when, why and how you eat.

Be mindful of your eating habits

- Take time to eat
- Notice when you are hungry and when you are full

Cook more often

- Plan what you eat
- Involve others in planning and preparing meals

Enjoy your food

- Culture and food traditions can be a part of healthy eating

Eat meals with others

Make it a habit to eat a variety of healthy foods each day.

Eat plenty of vegetables and fruits, whole grain foods and protein foods. Choose protein foods that come from plants more often.

- Choose foods with healthy fats instead of saturated fat

Limit highly processed foods. If you choose these foods, eat them less often and in small amounts.

- Prepare meals and snacks using ingredients that have little to no added sodium, sugars or saturated fat
- Choose healthier menu options when eating out

Make water your drink of choice

- Replace sugary drinks with water

Use food labels

Be aware that food marketing can influence your choices

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Anti-inflammatory choices

Helpful for managing chronic diseases that involve inflammation:

- ▼ Arthritis
- ▼ Metabolic syndrome
- ▼ Heart disease
- ▼ High blood pressure (hypertension)
- ▼ Diabetes

As Dr. Eder will also talk about, we often see people with more than one chronic condition and often there is a relationship with carrying extra weight, specifically in the form of extra fat on their bodies.



Omega- 3 supplements?

Caution:

- ▼ Omega 3 supplements are commonly recommended to people with RA or Lupus.
- ▼ Used to be recommended for OA.
- ▼ Meta-analysis of recent studies have found that those with elevated lipids may be at risk of developing atrial fibrillation from too much Omega-3 through supplements. Limit to 1gram per day and discuss with your Dr.

Cardiovasc J.Afr.2021 May-Jun; 32(3)167



How you eat can make a difference!

- ▼ A large percentage of people who attend my Mindful Eating classes eat too fast.
- ▼ SLOW DOWN when you eat. Take at least 20-30 minutes to eat a meal.
- ▼ Most people who struggle with extra weight often eat quickly.
- ▼ Chew your food. Put utensils down between bites. Pay attention and eat mindfully. Enjoy what you eat!
- ▼ It takes at least 20 minutes for your brain to catch up with your stomach.
- ▼ Get in touch with your hunger and fullness cues.



Intermittent Fasting

- ▼ More research supporting that intermittent fasting can be helpful especially time restricted. 10-14 hours? Hard to get all your nutrients to keep you healthy within 8 hours.
- ▼ Not all people will lose weight
- ▼ Food choices do matter
- ▼ Intermittent fasting can be helpful in reducing inflammatory markers!
- ▼ Do not try intermittent fasting if you suffer from an eating disorder
- ▼ If you have diabetes, please consult your health care providers before trying intermittent fasting.



Diet and Psoriatic Arthritis

- ▼ Those with PsA suffer from enhanced enteric permeability and inflammation.
- ▼ Probiotics were shown to help. Used Bifidobacterium and lactobacillus strains
- ▼ Measured zonulin and alpha1-antitrypsin (measures of permeability) and calprotectin (gut inflammation). All improved after 12 weeks of supplementation



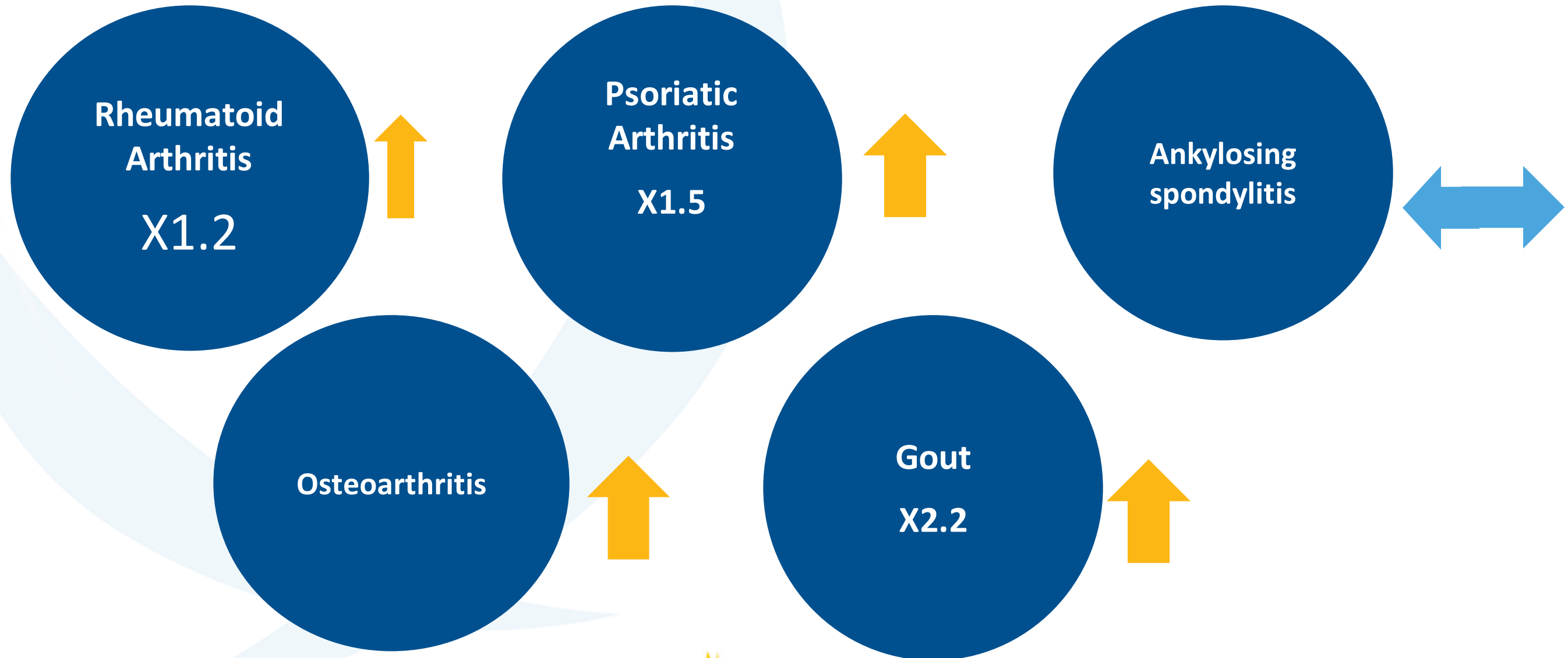
(Haidmayer A et al. Nutrients 2020)

Q

How does weight affect arthritis?



Overweight & Risk of Rheumatic Diseases



Overweight Exacerbates Co-morbidities in Arthritis



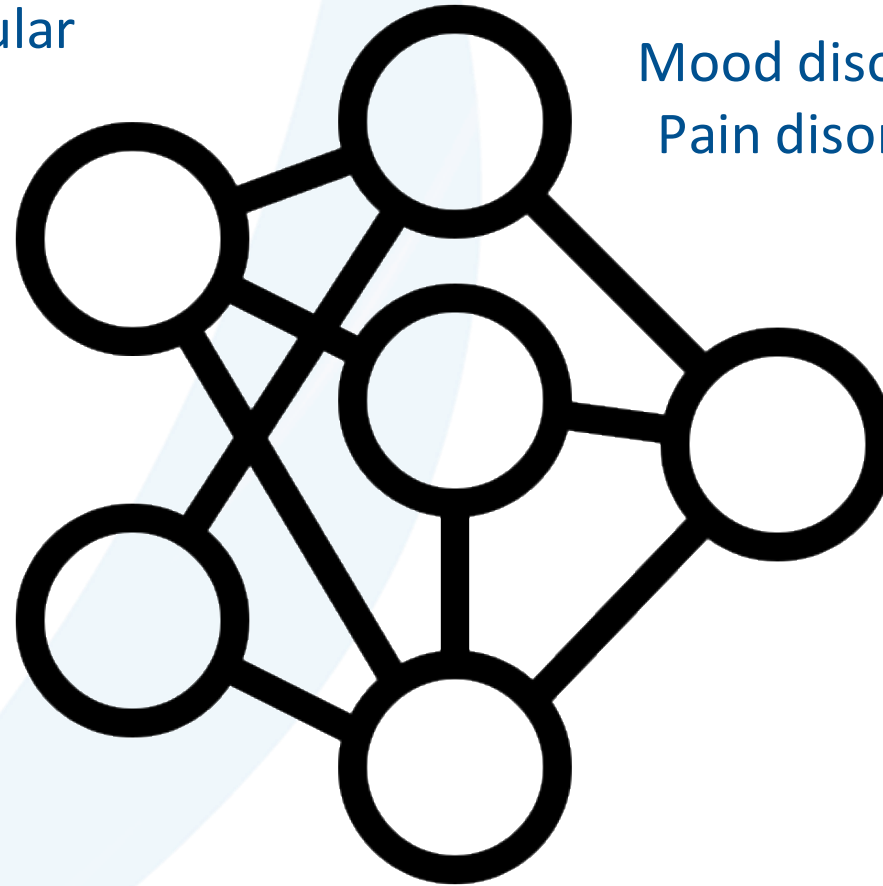
Cardiovascular
diseases



Mood disorders
Pain disorders

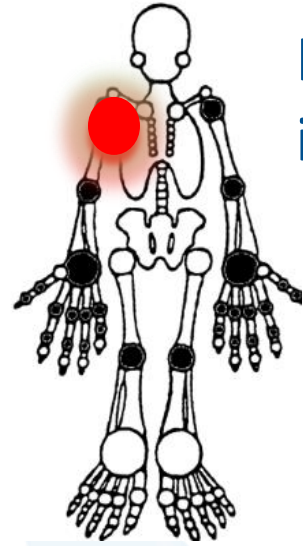


Metabolic Syndrome



Inflammatory Arthritis

Overweight complicates disease activity monitoring



Higher levels of pain & disability that are independent of joint damage progression



Higher levels of inflammatory markers in the blood that may not necessarily reflect arthritis activity



Joint examination is more complex and may require more frequent use of imaging

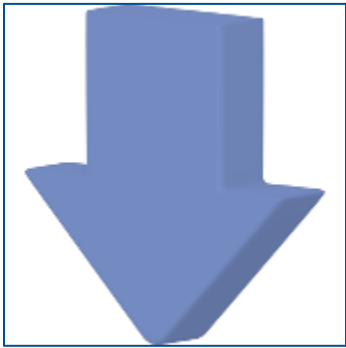
Overweight is associated with lower chances of achieving minimal disease activity state



557 patients with PsA
Target: Minimal Disease
Activity



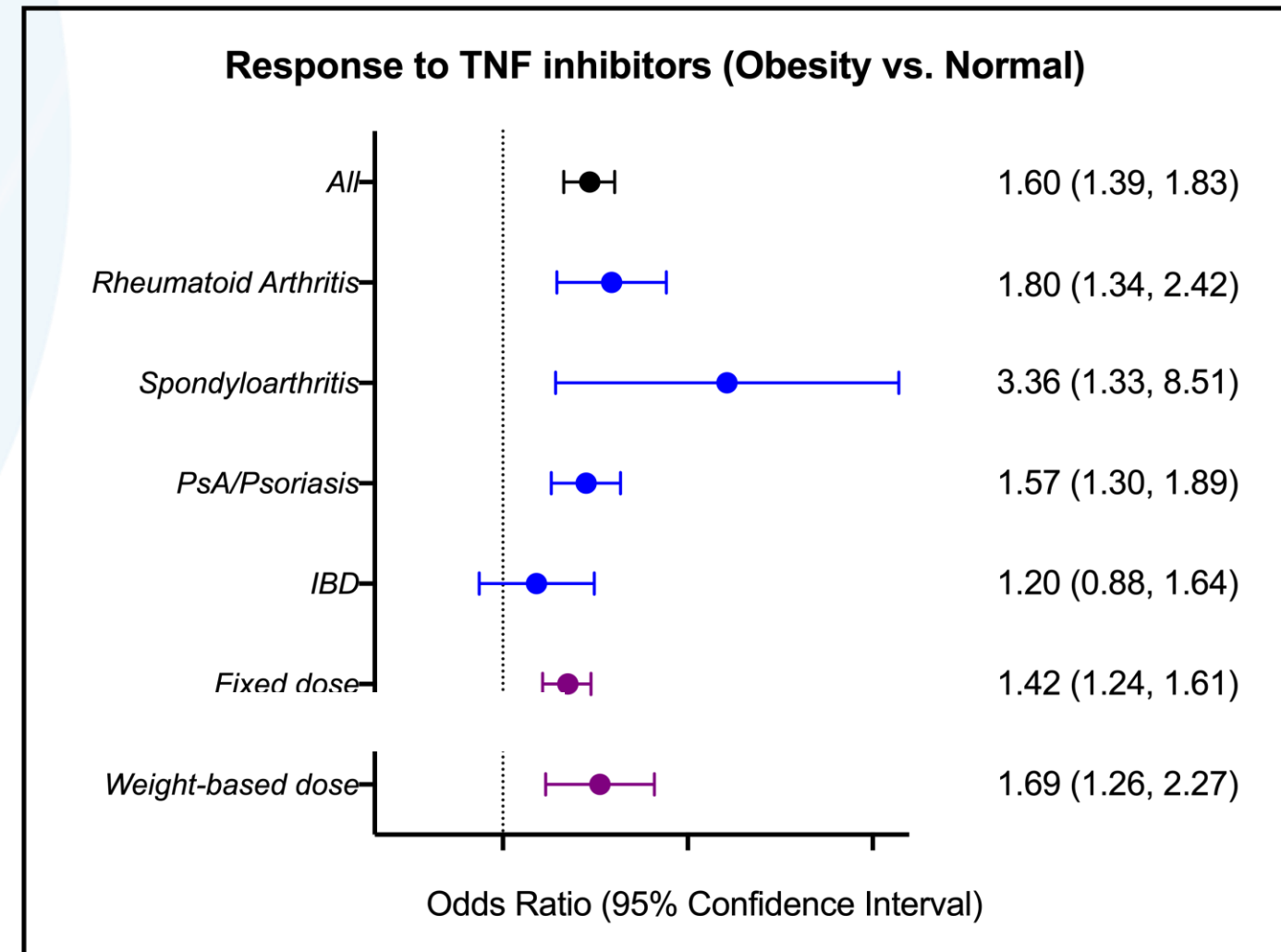
in patients with
BMI > 25



in patients with
BMI > 30

Overweight reduces response to biologic therapy

- ▼ Obesity is associated with 60% higher risk of treatment failure
- ▼ 1 unit of BMI increase is associated with 6.5% higher risk of failure
- ▼ No clear association with a specific drug
- ▼ Higher doses may improve response



➔ Treatment failure

Principles of Obesity Management

Medical Nutrition Therapy: Personalized counselling by a registered dietician with a focus on healthy food choices

Exercise: 30-60 min of moderate/vigorous physical activity in most days



Behavioral

Cognitive approach to behavioral change



Medications

Liraglutide
Naltrexon/bupropion
Orlistat



Bariatric surgery

BMI > 40 or
BMI > 35+ obesity-related disease

Q

Do you have recommendations for eating healthy on a budget?



Eating healthy on a budget?

- ▼ Meat costs the most in terms of protein foods
- ▼ Eat less meat and more plant-based proteins
- ▼ Buy foods when in season
- ▼ Check flyers
- ▼ Know where to look in the grocery store
- ▼ Use apps such as Flipp
- ▼ inflationcookbook.com



Challenges for people

- ▼ Can you always eat a healthy diet?
- ▼ How do friends and family influence your eating?
- ▼ How does marketing and food availability influence your eating?
- ▼ How does the environment affect your eating?
- ▼ Food is everywhere!
- ▼ Cost comes into the picture.
- ▼ How about your energy? Your ability to cook?
- ▼ How do you make healthy eating the easy choice?



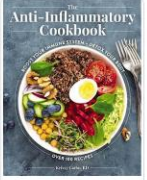


What's new in research about arthritis and nutrition?



What about Diet?

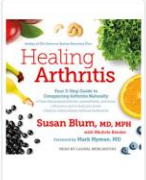
Sponsored · Shop anti inflammatory diet arthritis :



The Anti-Inflammatory...
CA\$33.95
Indigo Books & Mu...



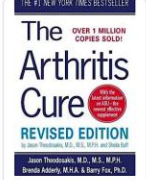
The Complete Anti-Inflammatory Diet...
CA\$24.99
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The Inflammation Spectrum - ...
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Verywell Health
An Arthritis Diet: Benefits and How It ...



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Anti-inflammatory Foo...



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Foods that fight infla...



Dr. Weil
Anti-inflammatory Food Pyramid | Anti ...



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THE ARTHRITIS DIET: ...



HealthCentral
Rheumatoid Arthritis Diet: What to Eat ...



Quantum Pain and Sports Me...
Anti-inflammatory Diet to R...



Pinterest
Pin on Healthy Eating



Arthritis NSW
Anti-inflammatory diet – made easy ...



myRAteam
The Anti-inflammatory Diet for ...



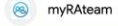
Beverly Hills Orthopedic Institute
Do's & Don'ts for Rheumatoid ...



YouTube
066 Anti inflammatory food diet for ...



Verywell Health
Diet and Exercise for Rheumatoid Arthritis

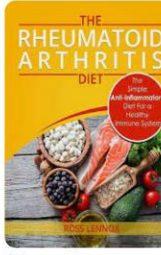


← → ⋮ ✕


THE ANTI-INFLAMMATORY DIET FOR RHEUMATOID ARTHRITIS

The Anti-Inflammatory Diet for Rheumatoid Arthritis | myRAteam Visit

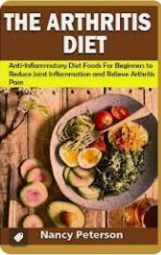
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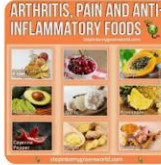
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Pinterest
Pin on Arthritis Diet & N...




Amazon · In stock
THE ARTHRITIS DIET: ...




Pinterest
Pin on Live Without Pain...




myflowerbg.com
Rheumatoid Arthritis Die...




Boldsly
World Arthritis Day 2020...



Physicians Association for...
Rheumatoid Arthritis an...







Yahoo Entertainment ✓

@YahooEnt

Kim Kardashian says plant-based diet helps her psoriasis: 'It's made me more mindful' ✓

yho0.it/3RhGnlb



4:09 PM · Aug 26, 2022 · SocialFlow

Limited information to support most suggested dietary interventions

Keto diet?

Anti-inflammatory diet?

Supplements?

Gluten free diet?

Mediterranean Diet is associated with improved outcomes in RA



120 patients with RA from
Portugal

Adherence with Mediterranean Diet (by questionnaire) was associated with:

70% less
disease activity
of RA
(by DAS28)

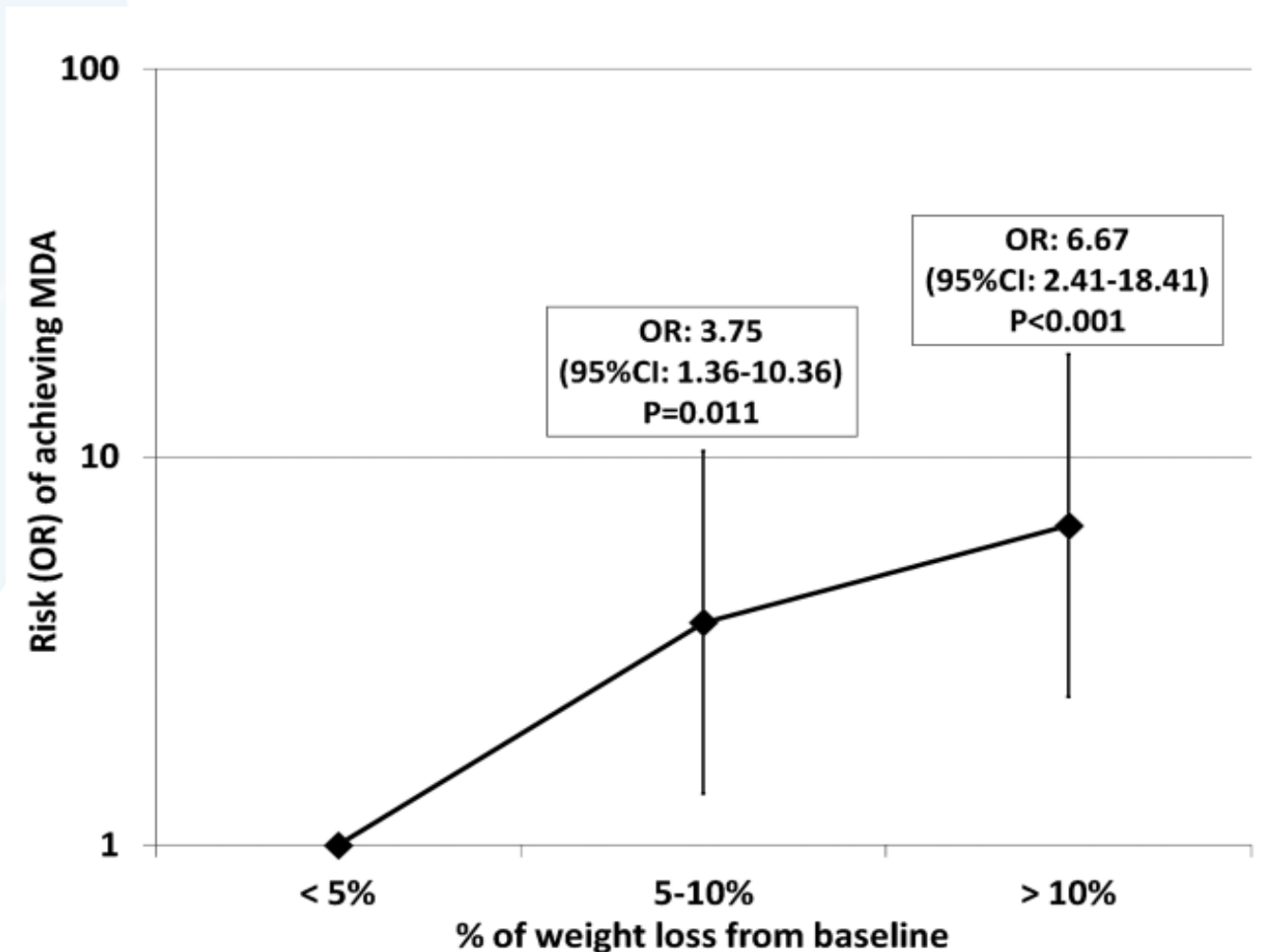
Less physical
dysfunction

Less impact of
RA on life

Inflammatory diet was not associated with improved outcomes

Low caloric diet improves psoriatic arthritis outcomes

- ▼ Patients with psoriatic arthritis initiating TNF inhibitors randomized to Low caloric diet and control
- ▼ Low caloric diet was associated with x1.9 fold chances of achieving MDA
- ▼ The degree of weight loss predicted response



2022 American College of Rheumatology Guideline for Exercise, Rehabilitation, Diet, and Additional Integrative Interventions for Rheumatoid Arthritis

Table 5. Diet recommendations for the management of rheumatoid arthritis*

Recommendation	Certainty of evidence	PICO questions for the Evidence Report	Evidence Summary page nos. in Supplementary Appendix 3†
We conditionally recommend adherence to a Mediterranean-style diet over no formally defined diet.	Low to moderate	1	8–78
We conditionally recommend <i>against</i> adherence to a formally defined diet, other than Mediterranean-style.	Very low to moderate	1	8–78
We conditionally recommend following established dietary recommendations without dietary supplements over adding dietary supplements.	Very low to moderate	2	79–190

* Intervention definitions and examples are provided in Table 1. PICO = Population, Intervention, Comparator, and Outcome.

† Available on the *Arthritis Care & Research* website at <https://onlinelibrary.wiley.com/doi/10.1002/acr.25117>.



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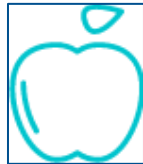
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We **conditionally** recommend following established dietary recommendations without dietary supplements over adding dietary supplements.

Very low to moderate

Mediterranean-Diet

Effect beyond weight reduction



Rich in Beneficial Compounds

MUFA (olive oil), Polyphenols (fruits and vegetables)



Model of Healthy diet

Reduces metabolic, cardiovascular and degenerative diseases



Mild weight loss

Beneficial effect may have alternative mechanism beyond weight reduction



Associated with improved psoriasis

Observational studies

DIPSA

Dietary Intervention in Psoriatic Arthritis

Inclusion criteria:

Psoriatic arthritis

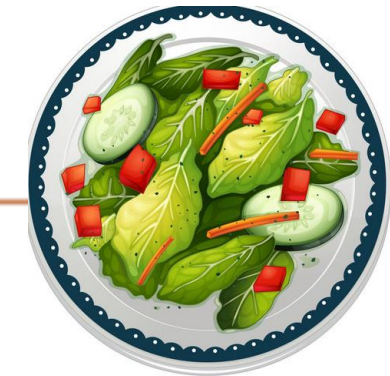
BMI>25

On stable therapy

Randomized control trial (1:1:1),
90 patients

0, 3 and 6 months visits

Primary outcome: Achievement of Minimal
disease activity

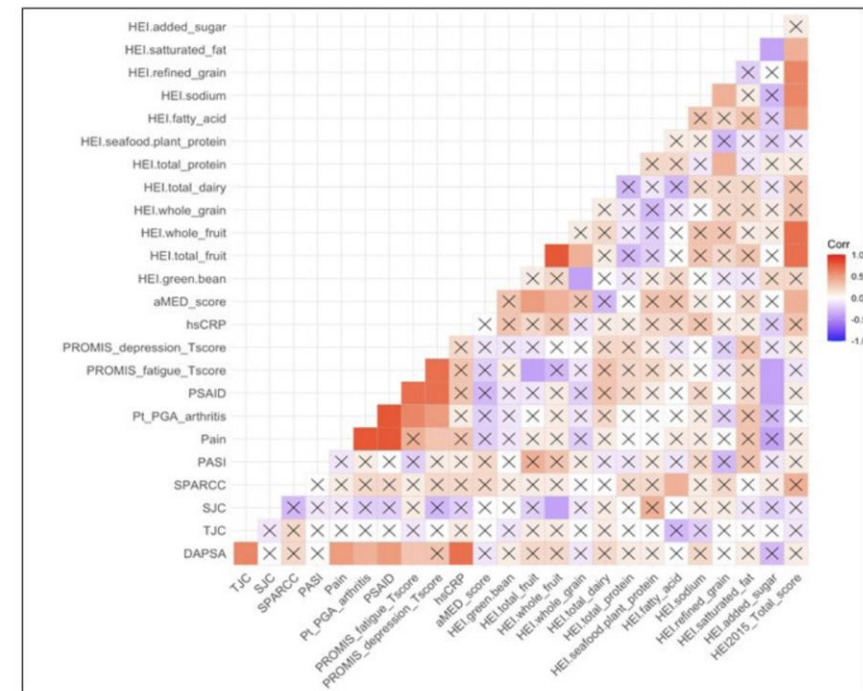


Metabolic Disorders and Abnormal Dietary Patterns and Their Association with Psoriatic Arthritis Activity: The Dietary Intervention in PsA (DIPSA) Study

Lihi Eder¹, Charlene Compher², Helen Emanoilidis³, Ryan F. Quinn², Dafna Gladman⁴, Vinod Chandran⁵, Jose Scher⁶ and Alexis Ogdie⁷, ¹Women's College Research Institute,

- Adherence with recommended sugar and fruit consumption correlated with lower measures of disease activity and fatigue
- DIPSA will determine the role of dietary interventions as adjunct therapy in PsA

Figure 2: Correlation matrix of HEI (total and sub-scores) and PsA measures of activity. "X" represents p value > 0.05.



aMED: adjusted Mediterranean Diet score; HEI: Healthy Eating Index; PASI: psoriasis area and severity index; PSAID: Psoriatic Arthritis Impact of Disease; PL_PGA_Arthritis: Patient global assessment of PsA; SJC: Swollen joint count; SPARCC: total enthesitis count by SPARCC; TJC: tender joint count

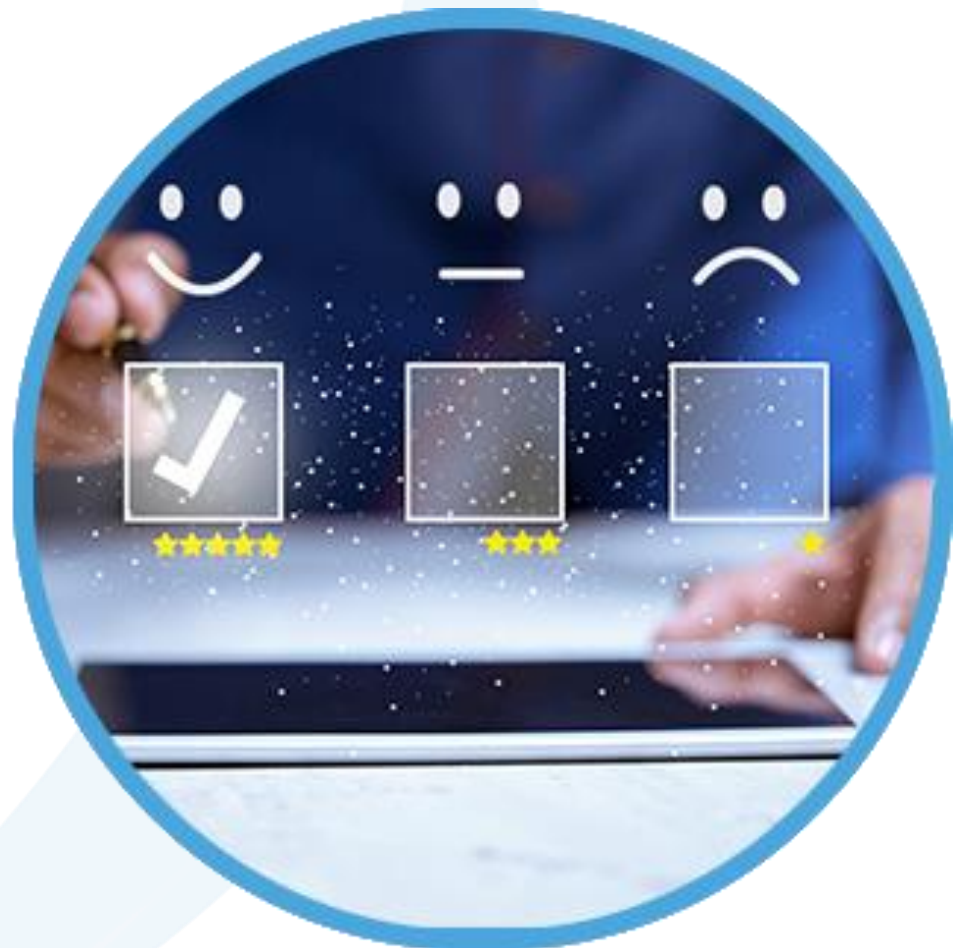
Any final thoughts or recommendations?




Questions



Tell us what you think...





**I'm lucky to have a great team,
but not everyone is. When
doctors struggle to understand
your disease, it feels like no one
will ever understand.**

THIS is arthritis.

Help end the agony of arthritis.

arthritis.ca

Upcoming Events

October



6 p.m. ET

Arthritis Talks: Arthritis in the Hips
featuring Dr. Parth Lodhia and Marie Westby

Learn about:

- Symptoms and risk factors
- Diagnosis and treatment options
- And much, much more

Register at:

Visit arthritis.ca/ArthritisTalks or click the link in your email inbox

