

# KNOW YOUR NUMBERS AND TRENDS

## Information is Empowering



As people with autoimmunity, we are predisposed to complications: some from the inflammation itself and some from medications used to reduce inflammation. Because of these risks, your doctor may request certain tests for you to closely monitor your health and side effects of medications. (Reviewed by multiple medical practitioners\*)

### WHAT CAN WE AS PATIENTS DO?

- Educate ourselves on the factors that have an impact on our health: sleep, nutrition, mind-body connection, movement, and medications.
- Work with our health care team to keep an eye on the following test results (listed below) at intervals as suggested by them, dependent on your disease and general health status, medications, and risk.
- “Know Your Numbers” (results of the tests) and watch for trends. Refer to the normal range of values provided by the lab and review them with your health care team to see what values are appropriate for you.
- Join patient groups like those listed below to learn more and get support.

\* **CAPA (Canadian Arthritis Patient Alliance):** Helping patients living with arthritis find their voice [www.arthritispatient.ca](http://www.arthritispatient.ca)

\* **Dragon Claw:** Encouraging self-care for those living with autoimmunity [www.dragonclaw.net](http://www.dragonclaw.net) and Dragon Talks, a weekly meeting on zoom [info@dragonclaw.net](mailto:info@dragonclaw.net) to register (free).



The table below outlines a list of blood tests with simple explanations. There is also a checklist at the end of this document that lists these tests that you can print and take to your appointment(s).

## BLOOD WORK

<b>1</b> <b>COMPLETE BLOOD COUNT (CBC)</b>	To ensure that our red blood cells (hemoglobin), white cells (infection fighters), and platelets (clotting helpers) are within a safe range.
<b>2</b> <b>INFLAMMATION MARKERS: C-REACTIVE PROTEIN (CRP) &amp; ERYTHROCYTE SEDIMENTATION RATE (ESR)</b>	In some cases, these tests measure inflammation. It is important to keep inflammation under control to prevent long term complications, like cardiovascular disease, sarcopenia, osteoporosis.
<b>3</b> <b>HEMOGLOBIN A1C (HBA1C)</b>	This measures the average blood sugar over the past 3 months. A high HbA1C signals insulin resistance, prediabetes, or latent autoimmune diabetes (LADA).
<b>4</b> <b>CHOLESTEROLS AND TRIGLYCERIDES</b>	As a person with an autoimmune condition, we are predisposed to cardiac disease. Some medications raise cholesterol. Current guidelines advise a full risk assessment for metabolic syndrome rather than relying on cholesterol alone.
<b>5</b> <b>VITAMIN D</b>	It is becoming evident that Vitamin D plays a role in many functions. Many of us are deficient in Vitamin D.
<b>6</b> <b>OTHERS</b>	Your health team may also want to keep an eye on ferritin (iron storage), albumin, liver function tests (some medications can irritate the liver), and kidney function.



There are other values/tests to review regularly and they are described in the table below:

<b>1</b>	<b>BLOOD PRESSURE</b>	Chronic hypertension has ramifications throughout our bodies. Some medications may raise blood pressure which also trends upward with age.
<b>2</b>	<b>BONE MINERAL DENSITY (BMD), DEXA SCAN</b>	Inflammation, many medical conditions, early menopause and some medications can cause bone loss as can inactivity. Losing bone strength is “silent” until a fracture (break) occurs. There are medications and lifestyle changes that can help prevent osteoporosis and fractures.
<b>3</b>	<b>EYE EXAMS</b>	Glaucoma (increased pressure within the eye) is silent until damage is done. Our diseases and/or medications can affect eye health. Regular clinical eye exams, including photos of the back of the eye (retina) are recommended.
<b>4</b>	<b>IMMUNIZATIONS</b>	Because our medications lower some aspects of our immune system, it is very important to keep all immunizations up to date. Check with your health care team and public health for up-to-date recommendations: annual flu, pneumonia, shingles, CoVid 19 and childhood vaccines.
<b>5</b>	<b>WEIGHT</b>	Keep tabs on your weight. Too high or too low is unhealthy. Work with a nutritionist if need be. Watch for trends upward or downward and intervene when necessary.
<b>6</b>	<b>SKIN CHECK</b>	Immune suppressants may leave us more at risk of skin cancers.
<b>7</b>	<b>IMAGING (XRAYS, SCANS) OF AFFECTED JOINTS</b>	At times, it may be useful to image to assess such things as erosions, fusions, dislocations, wear and tear.

## CHECKLIST

Here is the single sheet to print and take with you to your health care appointment. We have left room for you to make notes such as the appropriate range and frequency of testing for you. We did not include normal values as these may vary from country to country as the laboratories use different units of measure.

### BLOOD WORK

<input type="checkbox"/>	<b>CBC</b> Complete blood count	Hemoglobin White blood count	Platelets
<input type="checkbox"/>	<b>Inflammation markers</b>	C-reactive protein (CRP) Erythrocyte Sedimentation (ESR)	
<input type="checkbox"/>	<b>HbA1C</b> Hemoglobin A1C		
<input type="checkbox"/>	<b>Cholesterol and triglycerides</b>	Cholesterol HDL cholesterol ("good") Non-HDL cholesterol	LDL cholesterol ("bad") Triglycerides
<input type="checkbox"/>	<b>Vitamin D</b>		
<input type="checkbox"/>	<b>Liver</b> (one or more may be chosen)	Alanine transaminase (ALT) Aspartate transaminase (AST) Alkaline phosphatase (ALP)	Gamma-glutamyltransferase (GGT) Lactate dehydrogenase (LD)
<input type="checkbox"/>	<b>Kidney</b>	Creatinine eGFR	Sodium Potassium

### OTHER TESTS

<input type="checkbox"/>	<b>Blood pressure</b>		
<input type="checkbox"/>	<b>Bone Mineral Density via DEXA scan</b>		
<input type="checkbox"/>	<b>Eye exams</b>		
<input type="checkbox"/>	<b>Immunizations</b> Consider using one of the apps to keep track of these: e.g. CANImmunize for Canadians or My Health Record app for Australians		
<input type="checkbox"/>	<b>Weight</b>		

## DISCLAIMER:

This document does not replace the advice from your health care provider(s). We are patient organizations, run by patients and this is advice we have gleaned from our collective experiences. Please review with your health care provider(s).

\* Reviewed Feb 2023 by [Medical Advisory Committee](https://arthritispatient.ca/about-us/) of CAPA <https://arthritispatient.ca/about-us/> and the following physicians for Dragon Claw:

- \* [Dr Daniel Lewis](https://www.daniellewis.com.au/), rheumatologist, The Lewis Institute for Health & Wellbeing, Melbourne, AU.
- \* Dr Peter Bell, lead Family Physician, Sharbot Lake Family Health Team, Ontario, Canada
- \* Dr Barbara Schumacher, retired Medical Director, Campus Wellness, University of Waterloo, Ontario, Canada
- \* Dr Kathleen Kett, family physician (retired)

Advice may change as medicine learns more and new medications are developed.

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