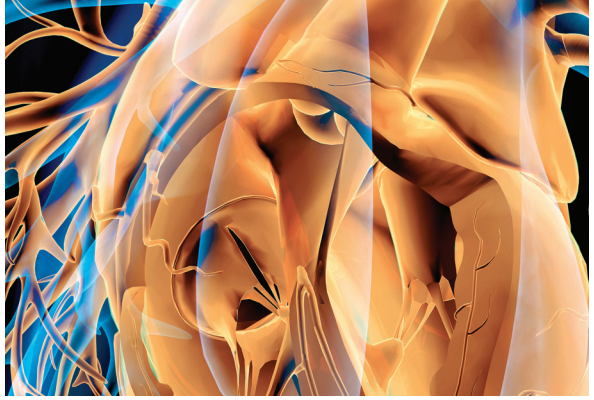
fx Medicine® BioCeuticals

PRESCRIBING CONCEPTS



Building Cardiometabolic Resilience: The central role of ubiquinol

1.3 million (6.7%) Australian adults report living with one or more **conditions related to heart, stroke and vascular disease**[1]

Despite lower cardiovascular disease prevalence, **women have double the risk of mortality from acute events compared to men**[2]

Statins are the #1 prescribed medicines in Australia[3]

What is cardiometabolic resilience?

The capacity of the cardiovascular and metabolic systems to withstand or recover from stressors and maintain optimal function, preventing or mitigating the development of cardiometabolic diseases.

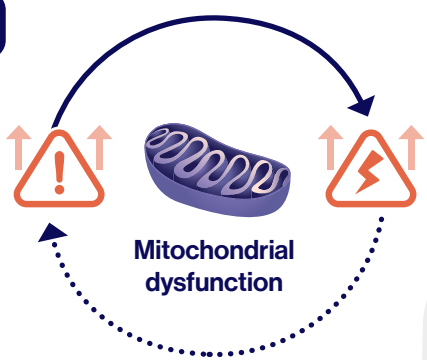
Risk factors

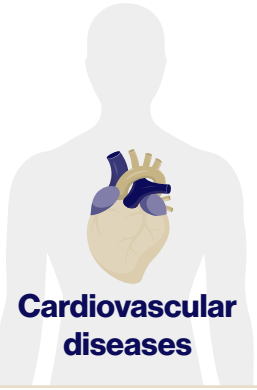
- **Age**
- **Female**
- Genetics
- Diet
- Psychological distress
- Sleep disturbances
- Physical inactivity
- Smoking
- Gastrointestinal dysbiosis
- Environmental stressors

Oxidation → **Inflammation**

Cardiometabolic consequences

- Elevated homocysteine
- Elevated blood lipids
- Hypertension
- Overweight & obesity
- Metabolic syndrome





How to help your customers build cardiometabolic resilience:

1 Identify

Identify at risk customers

2 Address

Address cellular health and mitochondrial function

3 Support

Provide targeted cardiometabolic support

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Building Cardiometabolic Resilience: Helping your customers

1 Identify at risk customers

Are they over 40 years old?

Ageing is associated with increased cellular inflammation and oxidation, and a decrease in endogenous antioxidant support.

Are they female?

Women face unique cardiovascular disease risk factors, with key reproductive life stages shaping their cardiometabolic health.

Age-related hormonal fluctuations
- Perimenopause, menopause & post-menopause

2 to 6-fold increased risk

Pregnancy
- Pre-eclampsia
- Gestational diabetes

2-fold increased risk

Endocrine-related disorders
- Polycystic ovarian syndrome (PCOS)
- Thyroid dysregulation

PCOS: 30% increased risk

Are they taking these medications?

- Cholesterol-lowering medication
- Antihypertensive medication
- Hypoglycaemic medication
- Low-dose aspirin
- Thyroid medication

These medications indicate that your customer is being treated for a cardiovascular or metabolic condition.

2 Address cellular health and mitochondrial function with CoQ10

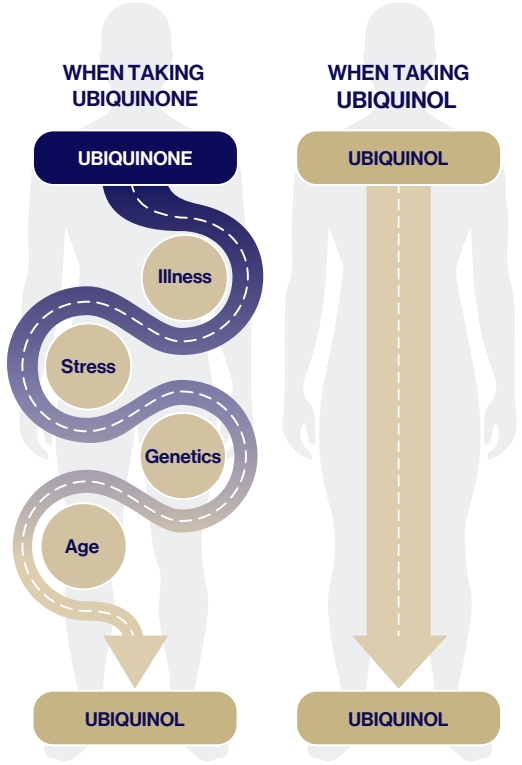
CoQ10: From ubiquinone to ubiquinol - a dynamic duo in action

- Coenzyme Q10 (CoQ10) is a lipid-soluble compound that is synthesised by the body via the mevalonate pathway, which also produces cholesterol
- It has two main roles in the body:
  - **Cellular energy production:** It plays a crucial role in the mitochondrial electron transport chain, a process in which substrates are converted to adenosine triphosphate (ATP) or cellular energy
  - **Antioxidant:** It helps control the build-up of reactive oxygen species (ROS) and helps prevent damage to cell membranes and lipoproteins

- **CoQ10 exists in the body in two forms: ubiquinone, the oxidised form, and ubiquinol the reduced or active form**
- In cells, both forms are required for cellular energy production
- In the circulation, more than 95% of CoQ10 is found in the active ubiquinol form
- Ubiquinol is the form that's responsible for CoQ10's antioxidant activity
- The body's production of CoQ10 steadily declines with age
- Other factors that may reduce CoQ10 levels include:
  - The use of certain medications e.g. statins
  - Illnesses that increase tissue requirements e.g. cardiometabolic disease

Supplemental ubiquinone & ubiquinol - what's the difference?

- Supplemental CoQ10 as ubiquinone, once absorbed, needs to be converted to ubiquinol
- Factors such as chronic illness, genetics, stress and age might impact the body's ability to absorb CoQ10
- Supplemental ubiquinol is rapidly absorbed and a bioavailable form of CoQ10, ready for use in the body



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Building Cardiometabolic Resilience: Helping your customers

Recommending CoQ10 and Ubiquinol

Ubiquinol is the most suitable recommendation for ages 40+

Why?

- Highly bioavailable form of CoQ10
- No need for conversion in the body
- Maintains CoQ10 levels in ageing individuals
- Maintains CoQ10 levels in statin users
- Prevents statin-associated muscle symptoms (SAMS)
- Clinically trialled support for:
  - Hypertension
  - Dyslipidaemia
  - Hypercholesterolaemia
  - Angina
  - Cardiomyopathy

CoQ10 (ubiquinone) is the most suitable recommendation for ages 20 - 40

Why?

- To maintain CoQ10 levels in the body
- To increase energy levels and physical stamina
- To enhance muscle health and function
- To enhance cardiovascular system health

When to prescribe high dose ubiquinol (300 mg)

Customer 1: Female – 53 years

- Perimenopausal, experiencing vasomotor symptoms

MEDICATION PROFILE

Metformin XR: 1000 mg BD (30 yrs)
Levothyroxine: 100 mcg OD (5 yrs)
Verapamil SR: 240 mg OD (1 yr)

QUICK CUSTOMER CHECK:

- [x] Over 40?
- [x] Female?
- [x] Peri-, menopausal or post-menopausal
- [x] Medications for cardiometabolic risk factors?
- [ ] Recovering from a cardiovascular event?

Customer 2: Female – 67 years

- Post-menopausal
- Hypertension
- Dyslipidaemia

MEDICATION PROFILE

Atorvastatin: 20 mg OD (5 yrs)
Amlodipine: 5 mg OD (5 yrs)
Escitalopram: 10 mg OD (8 yrs)

QUICK CUSTOMER CHECK:

- [x] Over 40?
- [x] Female?
- [x] Peri-, menopausal or post-menopausal
- [x] Medications for cardiometabolic risk factors?
- [ ] Recovering from a cardiovascular event?

Customer 3: Male – 71 years

- Heart attack (12 months ago)

MEDICATION PROFILE

Ramipril: 10 mg OD (12 months)
Rosuvastatin: 40 mg OD (12 months)
Aspirin: 100 mg OD (12 months)
Finasteride: 5 mg OD (5 years)

QUICK CUSTOMER CHECK:

- [x] Over 40?
- [ ] Female?
- [ ] Peri-, menopausal or post-menopausal
- [x] Medications for cardiometabolic risk factors?
- [x] Recovering from a cardiovascular event?

High-Dose Ubiquinol Supports Menopausal Wellness

In a study of 200 women taking 200 mg ubiquinol daily, 80% saw relief from menopausal symptoms including moods swings, irritability, stress and anxiety[4]

"Customers with 2 or more risk factors for established cardiometabolic disease, or are recovering from a cardiovascular event, warrant a recommendation of 300 mg of ubiquinol daily"
– Dr. Ross Walker

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Preventative cardiology:
The Essential Role of Ubiquinol

DR ROSS WALKER MB. BS (hons), FRACP, FCSANZ, Cardiologist

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3 Provide targeted cardiometabolic support

Ingredient	Antioxidant support/reduce ROS	Anti-inflammatory support	Cellular energy production	Blood vessel health	Blood lipid support	Homocysteine support	Blood glucose support/weight management	Manage and prevent SAMS	Female hormone/ menopause support
Ubiquinol	≥150 mg		≥150 mg		300 mg			≥150 mg	≥200 mg
CoQ10	≥150 mg		≥150 mg		400 - 500 mg			100 - 600 mg	
Omega-3 EPA+DHA		≥2700 mg			3400 mg				
Magnesium (orotate)		≥200 mg	200 mg						
Vitamin B12			500 - 1000 micrograms			500 - 1000 micrograms			
Folinic acid (active folic acid)						500 - 5000 micrograms			
Vitamin D3				1000 IU					1000 IU
Vitamin K2				180 micrograms					
Vitamin E (mixed tocopherols)	245 mg	245 - 490 mg			245 mg				
Chromium							300 micrograms		
Alpha lipoic acid	400 - 1200 mg						200 mg		
Herbal complex: GLUTForce® (Bitter melon & goat's rue)							200 mg dry concentrate		
Hops (Lifenol®) std. 8-prenylnaringenin									255 mg
Shatavari (*Asparagus racemosus*)									132 mg
Sage (*Salvia officinalis*)									600 mg
Probiotics	Foundation support for all aspects of health including cardiovascular health. Dysbiosis of the oral and gut microbiomes is directly correlated with cardiometabolic disease and cardiovascular disease progression.								

HAVE QUESTIONS? Contact our Naturopathic Advisory Service: **advisory@bioceuticals.com.au** | **1300 650 455**

To learn more on key ingredients associated with cardiometabolic health, visit: **www.bioceuticals.com.au/product/ingredient**

Dosages are for adults per day.