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## Canadian Family Medicine Clinical Card

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# Exercise Prescriptions

History	<ul style="list-style-type: none"> <li>- Exercise history (inc. prior success/failures)</li> <li>- <b>URGENT cardiac work-up if history of syncope or presyncope during exercise</b></li> <li>- Existing illnesses, injuries &amp; barriers</li> <li>- Pt. motivation, supports, resources, etc.</li> <li>- Check medication/supplement use</li> </ul>	RPE:	10	Maximum effort; unable to speak
		Rate of Perceived Exertion	9	Very hard effort; single words only
			7-8	Vigorous effort; speak in sentences
			4-6	Moderate effort; short conversations
Goal-Setting				
	<ul style="list-style-type: none"> <li>- Determine long-term goals (e.g. weight loss, ↓ frailty)</li> <li>- Break goals into achievable 2-4 week short-term goals</li> <li>- Document plan; pt. to return if any barrier encountered</li> </ul>		2-3	Light effort; carry conversation
			1	Very light effort

### Key Components of Exercise Planning for All Patients

1. Aerobic Stamina	<ul style="list-style-type: none"> <li>- If new, start at RPE 4-6, then gradually move up</li> <li>- When done should feel better/great, not exhausted</li> <li>- Add variety to ↓ injury risk and boredom (e.g. games, dance, hikes)</li> </ul>
2. Core / Flexibility	<ul style="list-style-type: none"> <li>- Key to reduce risk of injury from falls and exercising in poor posture</li> <li>- Stretching, yoga, pilates, exercise (Swiss) ball work</li> </ul>
3. Strength	<ul style="list-style-type: none"> <li>- Slow and controlled; always tighten core and keep good posture</li> <li>- Don't strength train same muscle groups 2 days in a row</li> </ul>
4. Nutrition	<ul style="list-style-type: none"> <li>- Ensure protein in every meal; eat breakfast every day</li> <li>- Eat pre- and post- exercise (carbs and protein within 30 minutes)</li> <li>- Drink water (ensure urine maintains a tinge of yellow)</li> <li>- Ensure sufficient caloric intake</li> </ul>

### Specific Scenarios

Sedentary	<ul style="list-style-type: none"> <li>- Start with 20 min aerobic, 5-7 days/wk; RPE 4-6. AND 3 sessions x 20 min strength training/wk.</li> </ul>
Obesity	<ul style="list-style-type: none"> <li>- Lower intensity exercise for longer duration</li> <li>- Progress weekly up to 60 min 5-7 times/wk; RPE 7-8.</li> <li>- Try to make sitting active (e.g., sitting on ball, using treadmill, etc.)</li> </ul>
Frail, Elderly	<ul style="list-style-type: none"> <li>- Go at own pace, never give up (gradually increase intensity + freq.)</li> <li>- Focus on strength &amp; muscle-building (e.g., resist. bands, dumbbells)</li> <li>- Balance work (e.g., standing single leg, changing directions)</li> <li>- Range of motion exercises to minimize stiffness</li> </ul>
Osteoporosis	<ul style="list-style-type: none"> <li>- Incl. weight-bearing exercise and balance work (e.g., single leg stand)</li> <li>- Strengthen back extensors &amp; <b>avoid</b> back flexion</li> </ul>
Depression	<ul style="list-style-type: none"> <li>- Any activity will help ↓ low mood, especially if daily; try team sports.</li> </ul>
Cardiac Risk	<ul style="list-style-type: none"> <li>- Start with 10 min of moderate exercise 2-3 times/day</li> <li>- Increase episodes by 5 minutes every week</li> </ul>
Lower Back Pain	<ul style="list-style-type: none"> <li>- Brace core by contracting all muscles around spine</li> <li>- Repeat stabilization exercises (e.g., planks) multiple times per day</li> <li>- Maintain a neutral spine while doing exercises, e.g., side planks</li> <li>- Strive for quality of movement, not quantity; strive for symmetry</li> </ul>
Leg Joint Pain	<ul style="list-style-type: none"> <li>- Exercise bike, swimming, snowshoeing all decrease lower joint strain</li> <li>- Ensure assessment to rule out treatable causes</li> </ul>
Asthma	<ul style="list-style-type: none"> <li>- Ensure asthma is under good control (through inhaled steroids, etc.)</li> <li>- Breath-control exercise (yoga and tai-chi) improve asthma control</li> <li>- Moderate intensity warm up should precede any significant exercise</li> <li>- Spurt activity (e.g., racquet sports) are ideal</li> </ul>
Type 2 Diabetes	<ul style="list-style-type: none"> <li>- Drink ++ fluids during exercise; bring food/glucose tablets</li> <li>- Ensure proper exercise footwear and daily foot inspection</li> </ul>
Chronic Dz	<ul style="list-style-type: none"> <li>- Most are improved with active living/exercise</li> </ul>

Key References: Borg GAV. Borg's Perceived Exertion and Pain Scales. *Human Kinetics*. 1998. ACSMs Resource Manual for Guidelines for Exercise Testing and Prescription, 7<sup>th</sup> Ed. Lippincott Williams & Wilkins. 2013. Ehrman JK, et al. *Clinical Exercise Physiology*, 3<sup>rd</sup> Ed. *Human Kinetics*. 2013.