

Undulating Periodization

A programming scheme, also known as nonlinear periodization, that uses changes in volume, intensity, and exercise selection to provide loading differences on a daily or weekly basis.



So, know that linear periodization is a gradual increase of intensity and decrease of reps, and non-linear/undulating is more all over the place.



General Rep Ranges To Know

General fitness: 8-12

reps 60-80% 1RM

Beginners trying to improve

motor performance: 40-50% 1RM

Strength gain for advanced

clients: 1-6 reps 80% or more 1RM

Hypertrophy: 6-20

reps and a wide

variety of intensities

are possible based on

new research.

Other Programming Stuff

<5 Sets per week per muscle group might be enough for beginners.

Experienced lifters may need 10+

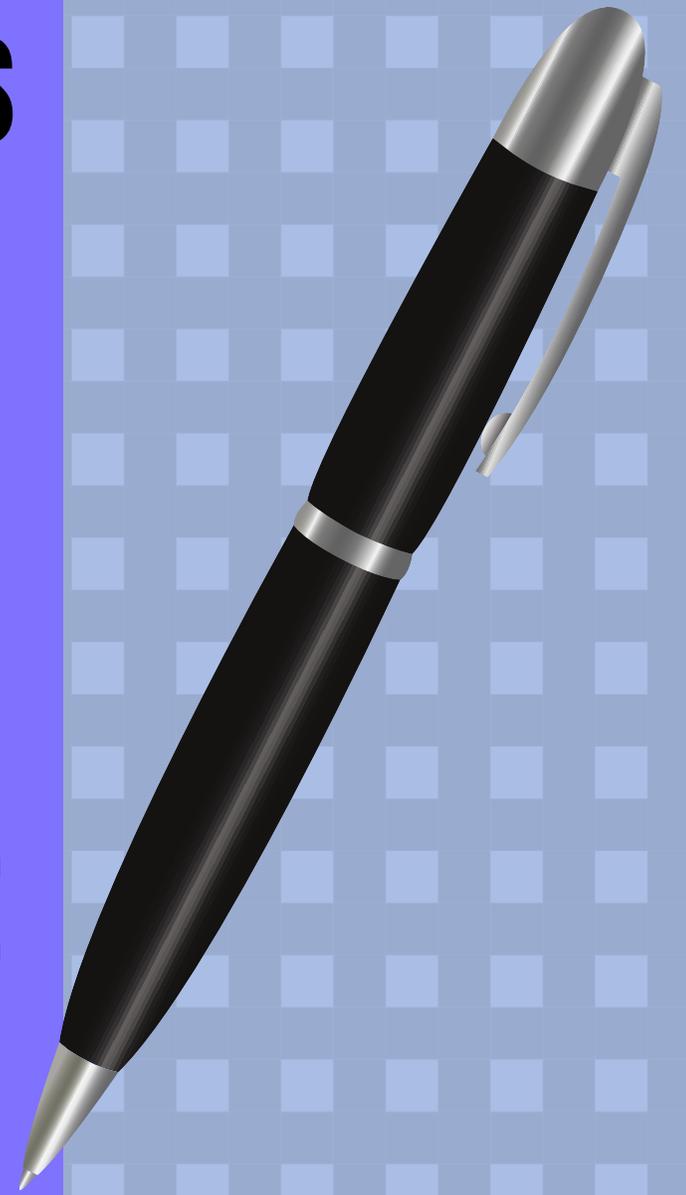
2-3 nonconsecutive days for beginners. More advanced can do more or less days.

Rest: 2+ mins between sets for heavier weight or bigger moves. 1 min give or take for some other moves/goals (hypertrophy, endurance)

Preparticipation Health Screening



The PAR-Q+ is a subjective yes or no questionnaire that is used to determine whether it's safe or not for a client to begin an exercise program. It has follow up portions to reduce false positive readings.



The Health History

Questionnaire is next.

It's similar to the PARQ, but it's not yes or no questions.

It gets you more detailed info on your client. Things like what medications they're taking, family history, etc. are covered.





The PAR Q and PAR Q+ are very similar. When I mention either assume I'm talking about both.

The PAR Q+ is newer, has follow up questions and is better designed to be used by anyone, not just people with conditions.

A YES on the PAR Q is possibly a reason to refer out before beginning exercise. If they answer NO to all follow up questions after the first page they can begin light to moderate intensity before seeing the doc. A YES on a follow up pg. means you should refer first.



Informed Consent: Ethical and legal stuff. Client should sign before starting.

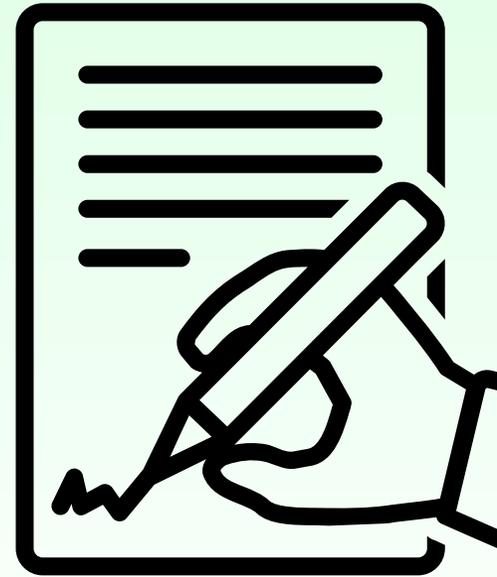


Medical Clearance Form: If something came up in the PARQ or the health history evaluation, this would be done.

Informed Consent Form: gives clients info about the content and process of the program delivery system.

Essential elements of the form are...

- Detailed description of the program**
- Risks and benefits**
- Confidentiality clause**
- Responsibilities of the participant**
- Documentation/acceptance of the form itself**



**What form informs
the client about the
risks of exercise?**

A: Informed Consent



Your client says “yes” to something on the PAR-Q+. What happens next? A: ePARmed-X

It acts as a follow-up to the PAR-Q+ (Physical Activity Readiness Questionnaire for Everyone) to determine if a person needs a physician's clearance before starting or increasing their physical activity or undergoing a fitness appraisal



Consultations and behavior change



Something you're pretty likely to be asked about on the test is the transtheoretical model.

There are five stages to that.



1

PRE-CONTEMPLATION

2

CONTEMPLATION

3

PREPARATION

4

ACTION

5

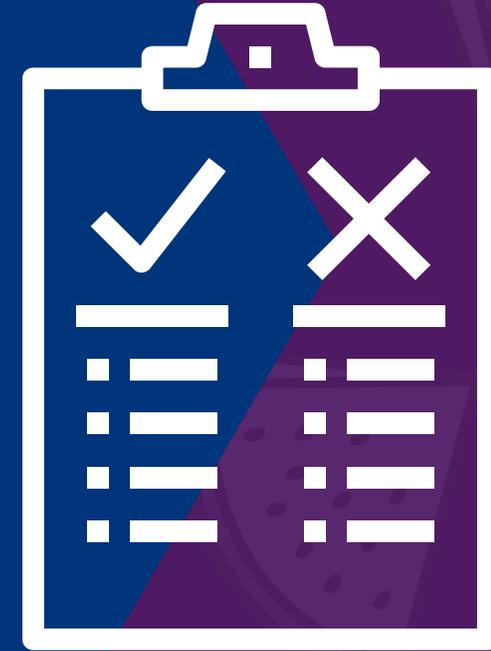
MAINTENANCE

First, we have pre-contemplation where people are physically inactive. They're not intending on beginning an exercise program, and they don't see exercise as worth their time.

NOPE!

Then you have contemplation.

People who are inactive, but thinking about becoming more active in the next six months go here. They're still weighing the pros and cons of exercise, but they're starting to consider the benefits.



Next is preparation. People in this stage are doing some physical activity and preparing to adopt a more consistent activity program.

These people are only doing things like sporadic walking, but they're ready to adopt an active lifestyle.

Then you have the action stage. People are here when they're engaging in regular physical activity but have been doing so for less than six months.



Lastly, you have maintenance.

**People on this stage have
been working out consistently
for longer than six months.**

**Be able to identify where a
person is within this model!**



Decisional Balance

- Acknowledge pros and cons of health change
 - Part of the TTM (transtheoretical model)



- Reverse diabetes
- Less joint pain

- Exercise is hard
- Fear of failure

**Only a minority (usually less than 20%)
of a population at risk is prepared to
take action at any given time.**



SPECIFIC

MEASURABLE

ATTAINABLE

REALISTIC

TIMELY



Health Belief Model

Behavior change is predicted by
ones feeling of susceptibility.

Danger > Benefits

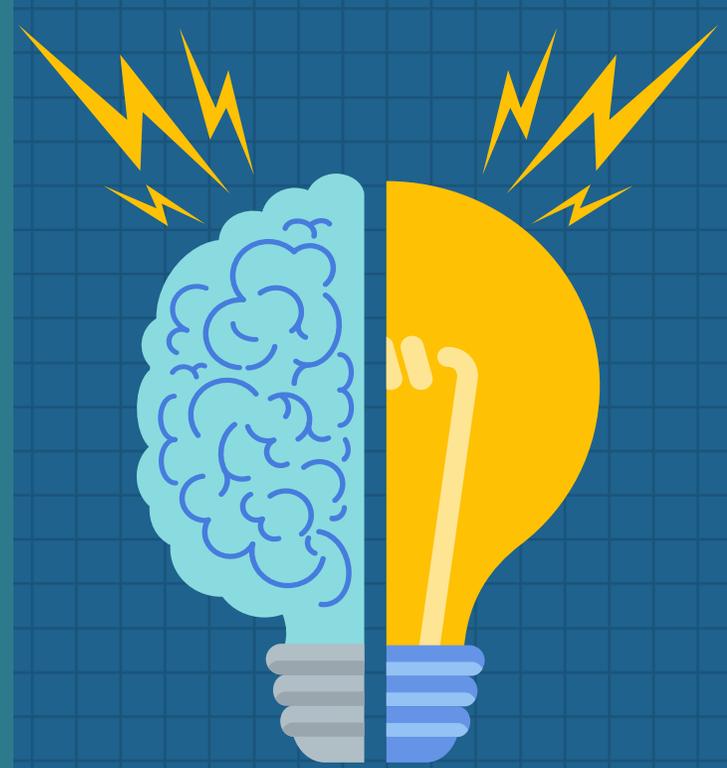
Not as useful for those without
identified health risks



Social Cognitive Theory

Outcome expectations and self efficacy are most important factors for behavior change.

Considers clients thoughts, environment, and feelings about behavior change



SCT's Two Most Important Factors In Behavior change

- Outcome Expectations**
- Self Efficacy**



Self Monitoring



Refers to the practice of tracking one's own behavior for the dual purpose of increasing awareness and monitoring progress.

Theory Of Planned Behavior

Intention to engage in a behavior is shaped by a clients attitude regarding: how helpful/enjoyable something is, subjective norms/social pressure, their self efficacy.



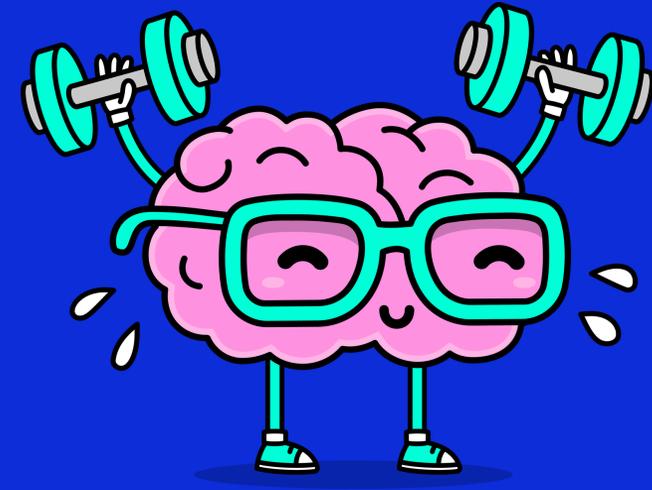
Social Ecological Model

Health behaviors aren't only shaped by the individual. Environment, relationships, laws, barriers, etc. also have an effect.



Intrinsic Vs Extrinsic Motivation

Intrinsic: Motivation that comes from within. The desire to do something because the activity itself is enjoyable, interesting, or personally satisfying. Typically more powerful.



Extrinsic: Motivation that occurs due to a potential reward or avoiding punishment.

Intrinsic motivation examples: Hitting the gym because you like how you feel after. Joining a running club because you enjoy running with your peers.



Extrinsic motivation examples: Doing your homework so you don't get detention. Lifting weights to look good and show off for your friends.

Self-Determination Theory

A psychological framework that explains human motivation by proposing that people are driven by three needs: autonomy (feeling free and in control of one's choices), competence (feeling capable and skilled in one's actions), and relatedness (feeling a sense of connection and belonging with others).



4 Types Of Support Examples

Emotional: A friend periodically calling to encourage sticking with the exercise program.



Tangible: A spouse offering to cook dinner while the client works out.

Informational: emails, posters, etc. on form

Appraisal: A spouse praising progress

Initial Consultation

1 Call 24-48 hours before

2 Be on time or early

3 Be professional

4 Stay in scope

5 Provide credible fitness programs



Principle Of Relationship Marketing

- Personal relationship should take precedence and sales will follow
- Retaining clients takes precedence over signing new clients



Rapport Building



- Ask simple open ended questions
- Listen and encourage with non verbal cues
- Clarify and summarize. Make sure you understand what they're saying
- Use reflective statements

Active Listening

- Asking Questions

- Reflecting

- Summarizing

- Observing non verbal cues

Clarifying, repeating, and summarizing what's said.

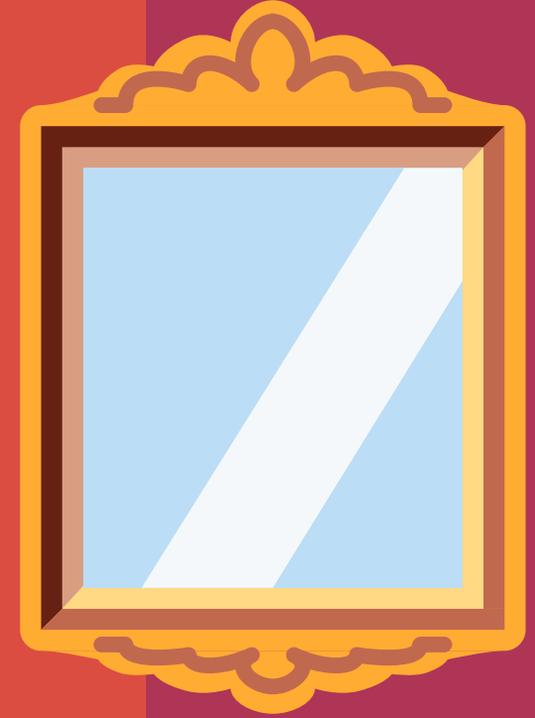


Reflections are big!

Client says: “ I want to lose 15 pounds, but my husband keeps bringing home pizza.”

You say: “I undertand that.

Sometimes the enviroment you live in can present challenges.”



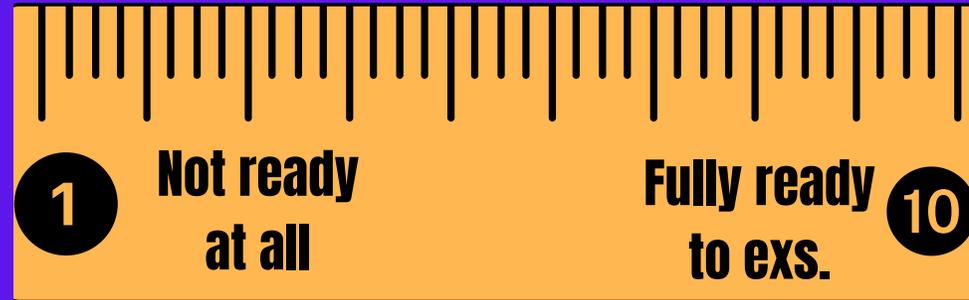
Whether we're talking about active listening or the client centered approach, know that body/facial language and nonverbal cues are huge.

You should only be speaking 10-15% of the time in a consultation. This means you'll spend a lot of time actively listening.



Motivational Interview

Ruler first
Grid second



PROS

CONS

Maintaining
activity

1

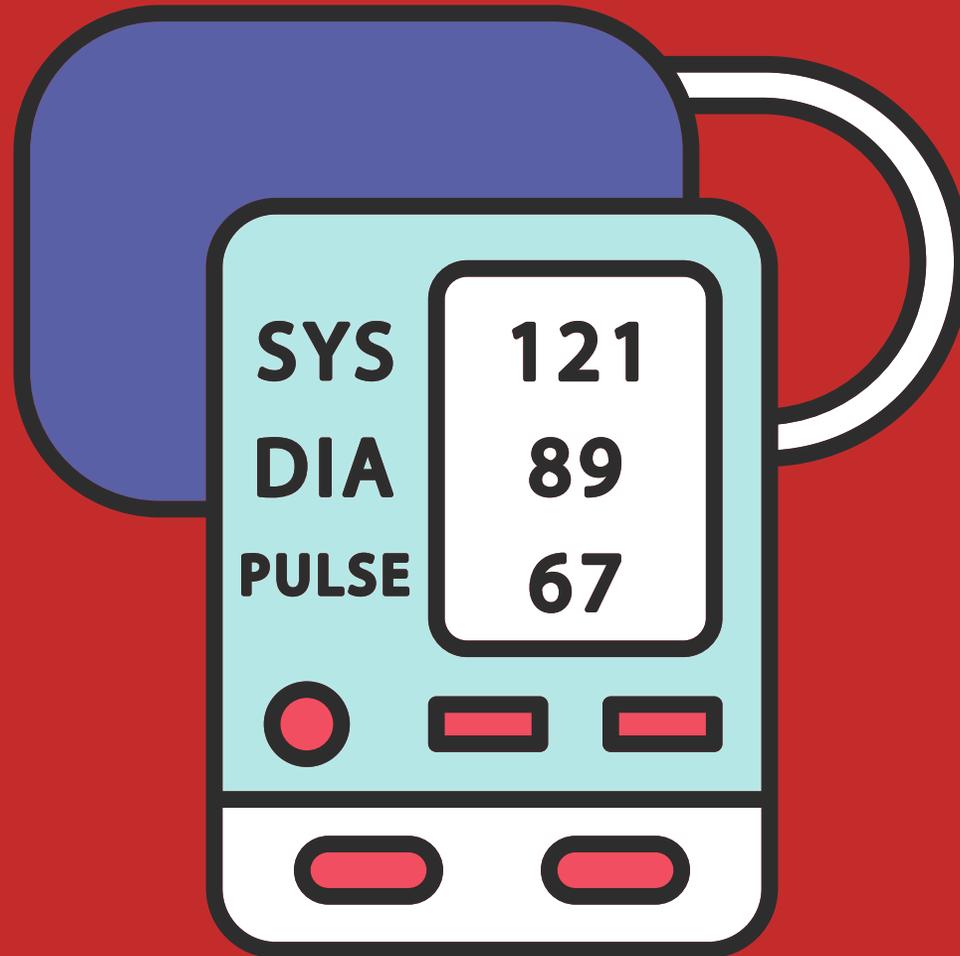
2

Increasing
activity

4

3

Risk Factors



Age- Men 45 or older and women 55 or older

Fam Hist.- Parent, child, sibling heart dis. prior to 55m or 65f

Smoke- Smoker or quit within last 6 months

Sedentary- Less than 30 mins of mod. int. exs. 3 days a week for 3 mon.

Obesity- BMI ≥ 30 or waist circ. over 102cm/40in M or 88cm/35in F

Hypertension- BP ≥ 130 sys. or 80 dia. or being on meds

Dyslipidemia - LDL ≥ 130 HDL < 40 or if on meds | Only total 200 \geq

Diabetes - fasting blood glucose ≥ 100 or 2 hr. OGTT ≥ 140 or A1C $\geq 5.7\%$

Low risk are people with ≤ 1 risk factor. Moderate are people with ≥ 2 factors and high risk are people with known cardiovascular or metabolic disease symptoms.

LDL VS HDL



LDL is often known as
bad cholesterol and HDL
is good Cholesterol.

HDL \geq 60 is a negative risk factor.

If someone has a triglyceride level of 209, where does that put them?

Normal

Borderline high

High

Very high

If someone has a triglyceride level of 209, where does that put them?

Normal	Less than 150 mg/dL
Borderline high	150-199 mg/dL
High	<u>200-499 mg/dL</u>
Very high	500 mg/dL or higher

Heart Rate

60-80 BPM typical

Bradycardia: HR under 60BPM

Tachycardia: HR over 100BPM

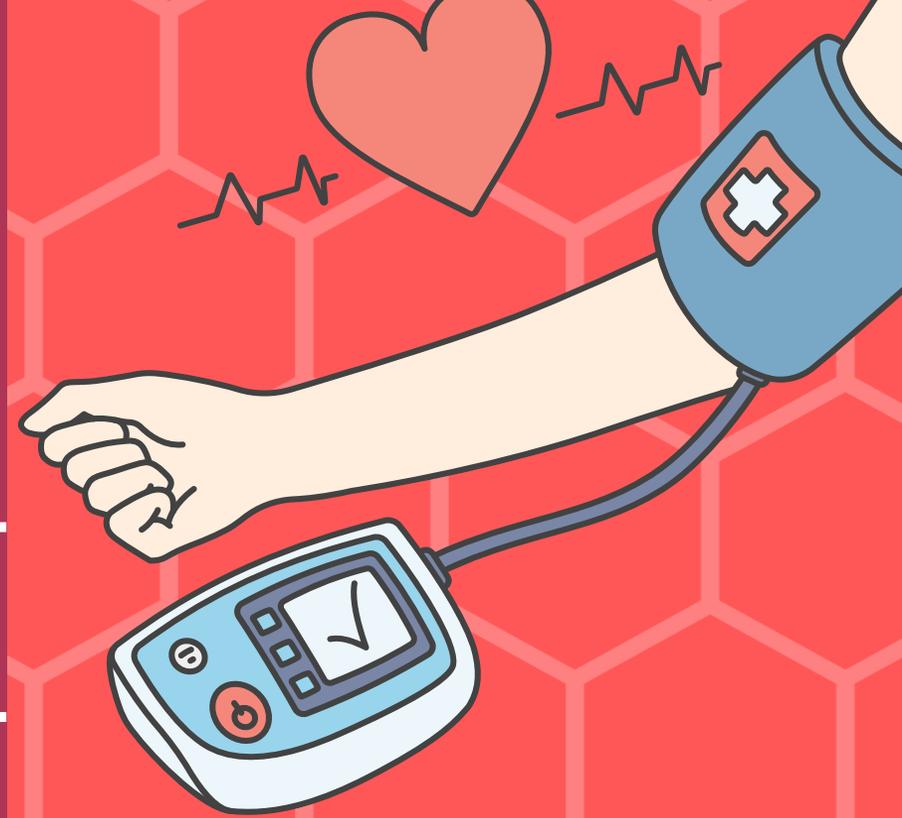
You can take it on the brachial artery, radial artery (lateral wrist beneath base of thumb), the carotid artery, and temporal artery.

You can take it a bunch of ways. EX. record beats for 6 seconds and multiply by 10.



Blood Pressure

	<u>Systolic</u>	<u>Diastolic</u>
Normal:	< 120	< 80
Elevated:	120- 129	< 80
Hypertension Stage 1	130- 139	80-89
Stage 2	≥140	≥ 90
HYP. Crisis	≥180	≥120



Blood Pressure Steps

- 1. Seated quietly for 5+ mins, feet on floor, back support**
- 2. Cuff around upper arm heart level, aligned brachial a.**
- 3. The bladder should encircle 80% of arm**
- 4. Stethoscope goes below antecubital space over brachial artery. Don't secure with your thumb.**
- 5. Quickly inflate to 20mm hg over first Korotkoff sound**
- 6. Slowly reduce pressure at 2-5 mm hg per second**
- 7. SBP: Point when the first 2 Korotkoff sounds are heard**
- 8. DBP: Point right before Korotkoff sounds disappear**

Blood Pressure Considerations

-No caffeine or cigs 30 mins prior to testing

-Many adults will need a larger cuff

-At least 2 measurements should be taken at least a min apart. The average is then taken.

-BP should be measured in both arms during first exam. Use higher pressure.

-Give patients their BP #'s verbally & written for goals