ADDENDUM N

Fitness: Zero to Full Competency

Curious how Tier, Stage, and Phase relate? See the Glossary.

Why This Addendum Exists

Chapter 15 tells you what to do at each tier of a disruption to stay physically capable of the tasks every other chapter assumes you can perform. It does not build the actual training and injury-management competency behind “lift correctly” and “manage overuse injuries,” the kind of understanding that adapts to a new situation rather than following a fixed routine. This addendum is a skill-building curriculum for exactly that, built from real, recognized certifications.

It’s organized by skill stage, not by disaster duration, following the same structure as the other addenda. As with Chapter 15 itself: anyone with an existing medical condition, injury, or mobility limitation should adapt this with input from a doctor or physical therapist rather than follow it as written.

Four stages: Foundations (basic safe practice), Applied Practice (hands-on competence), Self-Sufficiency (independent, resilient skill), and Mastery & Teaching (able to teach others and operate at community scale). Each stage covers two sub-skill tracks that run in parallel: strength and conditioning, and injury management.

Stage 1: Foundations (Awareness)

Goal: know the core movement-safety facts well enough to not injure yourself doing the physical tasks every other chapter requires. This stage is readable in a weekend, though the physical practice itself takes longer.

Strength & Conditioning: Core Knowledge

The core concept at this stage is that most exercise-related injuries during an actual emergency come from bad technique under pressure, not from insufficient strength, which is exactly why Chapter 15’s Tier 1 emphasizes lifting technique over conditioning volume. Understand the four

movement patterns that transfer directly to survival tasks: squats (lifting), hip hinges (lifting from the ground), pushing/pressing, and loaded carries. See the Physical Readiness for Emergencies skill guide for how these patterns connect to the specific physical demands a real disruption places on a household.

Injury Management: Core Knowledge

The core concept at this stage is the PEACE & LOVE protocol already covered in Chapter 15, replacing the outdated RICE approach: Protect, Elevate, Avoid anti-inflammatories, Compress, and Educate yourself on realistic recovery time in the first 48 hours; then Load, Optimism, Vascularization, and Exercise afterward. Understand why complete rest and ice alone are no longer considered best practice for most soft-tissue injuries.

Stage 1 Learning Path

Resource	Cost / Format	Notes
Dubois & Esculier, British Journal of Sports Medicine (2020), PEACE & LOVE protocol	Free abstract; full text may require access	Already cited in Chapter 15's Appendix C; the peer-reviewed origin of the protocol.
CDC Physical Activity Basics	Free, online	cdc.gov. Already cited in Chapter 15; general, medically reviewed guidance on safe exercise progression.
A reputable video series on squat/hinge/push/carry technique	Free, from a certified trainer or physical therapist	Prioritize sources credentialed through NASM, ACE, or a licensed PT, not an uncredentialed influencer.

Stage 1 Practice Exercises

- **Demonstrate correct lifting form:** Practice a proper hip-hinge lift (legs and hips, not lower back) with a light, safe object until it’s automatic, not something you have to consciously think through.
- **Learn PEACE & LOVE well enough to teach it back:** Explain the full protocol out loud from memory, including which phase applies in the first 48 hours versus after.
- **Do the effort-pacing math:** Cross-reference Chapter 15’s Tier 1 guidance on caloric restriction and effort pacing; understand concretely how your own output should adjust under a real reduced-calorie scenario.

Self-Check: Ready for Stage 2?

You should be able to demonstrate correct hip-hinge lifting technique without correction, and explain the full PEACE & LOVE protocol from memory well enough to teach it to someone else.

Stage 2: Applied Practice (Competent)

Goal: move from correct technique in isolation to real functional capacity under load, built through consistent practice rather than a single session.

Strength & Conditioning: Applied Practice

- **Build a real functional bodyweight routine:** Actually establish and follow Chapter 15's Tier 2 routine (squat, hinge, push, carry) on a consistent schedule for at least two months, not as a one-time trial.
- **Practice rucking with real progressive load:** Start at roughly 10% of body weight (already cited in Chapter 15) and progressively increase over weeks; log the actual distances and weights rather than estimating.
- **Keep a real training log:** Chapter 15's Tier 2 already recommends this; actually track load and frequency to catch the two common training mistakes (doing too much too soon, or not progressing at all) before they cause an injury or plateau.

Injury Management: Applied Practice

- **Assemble and understand your injury supplies in context:** Build the compression wraps and elevation-friendly setup Chapter 15 recommends, and actually know how each piece maps to a specific PEACE & LOVE phase.
- **Get CPR/First Aid certified if not already:** Cross-reference Addendum C (Medical Care); basic first aid certification is directly relevant to on-the-spot injury response during physical training or real labor. See the First Aid Basics skill guide for the core skills to practice between certification renewals.
- **Practice recognizing overexertion in real time:** During actual rucking or loaded-carry practice, deliberately notice and log the early physical signs of overexertion rather than pushing through them, building the pattern-recognition Chapter 15's Tier 3 depends on.

Stage 2 Learning Path

Resource	Cost / Format	Notes
A weighted pack/rucksack (or a normal pack loaded with water jugs)	Low-cost if repurposing existing gear	Already cited in Chapter 15's Tier 2 equipment.
A simple training log (notebook or app)	Free–$10	Consistency of use matters more than the specific tool.
Basic compression wraps and injury-management supplies	$20–$50	Cross-reference Addendum C's first aid kit for overlap rather than duplicating supplies.

Self-Check: Ready for Stage 3?

You should have followed a consistent functional training routine for at least two months with a real training log, progressively increased rucking load safely, and hold a current CPR/First Aid certification. A single good workout doesn't establish the pattern this stage requires.

Stage 3: Self-Sufficiency (Proficient)

Goal: genuine independent physical capacity sustained through real daily labor, the actual level Chapter 15's Tier 2 and Tier 3 assume a household has, plus enough injury-management judgment to keep training through minor setbacks correctly.

Strength & Conditioning: Self-Sufficiency

- **Begin personal training certification study:** NASM or ACE's Certified Personal Trainer program (both NCCA-accredited, requiring current CPR/AED certification) builds genuinely deeper programming knowledge than following a template routine; even partial study meaningfully improves your ability to adapt training to your household's real needs.
- **Rotate labor tasks deliberately:** Cross-reference Chapter 15's Tier 3 guidance on varying daily labor to avoid repetitive strain; actually build and follow a rotation across different physical tasks rather than repeating the same motion for months.
- **Build DIY strength equipment and use it consistently:** Filled sandbags, water jugs, or weighted containers (already cited in Chapter 15's Tier 3) at zero ongoing cost; the equipment

matters less than the consistency of real use.

Injury Management: Self-Sufficiency

- **Build real self-assessment skill for overuse injury:** Practice distinguishing normal training soreness from the early signs of a genuine overuse injury, the specific judgment Chapter 15's Tier 3 depends on to prevent chronic injury.
- **Cross-train with Addendum C's Wilderness First Responder track:** WFR training (Addendum C, Stage 3) covers musculoskeletal injury assessment in real depth; this is directly, meaningfully relevant to advanced injury management for physical training and labor.
- **Teach correct form to at least one other person:** Chapter 15's Tier 3 already calls for teaching correct lifting/movement technique to others; actually do this with at least one household or community member, not just yourself.

Stage 3 Learning Path

Resource	Cost / Format	Notes
NASM or ACE Certified Personal Trainer coursework	$799–$3,499 depending on package	nasm.org or acefitness.org. NCCA-accredited; requires current CPR/AED certification.
Wilderness First Responder (cross-reference Addendum C, Stage 3)	~$1,000–$1,300	Directly relevant musculoskeletal injury assessment training.
DIY strength equipment (sandbags, weighted containers)	Near-zero cost beyond containers on hand	Already cited in Chapter 15's Tier 3.

Self-Check: Ready for Stage 4?

You should be actively studying toward a personal trainer certification or have completed it, be able to distinguish normal soreness from a genuine overuse injury without hesitation, and have taught correct lifting form to at least one other person.

Stage 4: Mastery & Teaching (Expert)

Goal: professional-level credentials, the ability to teach and program for others, and real community-scale physical capacity coordination. This is the stage Chapter 15's Tier 4 (distributed community labor capacity) actually depends on.

Teaching & Certification

- **Complete NASM or ACE Certified Personal Trainer certification:** The full credential (a 100-question, open-book exam with a 70% passing threshold for NASM, similarly structured for ACE) is a genuine, NCCA-accredited professional standard; appropriate if training and programming for others is becoming a real skill you use regularly.
- **Understand (don't necessarily pursue) athletic trainer certification:** The BOC's Certified Athletic Trainer (ATC) credential requires a master's degree from a CAATE-accredited program and extensive supervised clinical experience; a genuinely graduate-level professional path well beyond this addendum's scope, worth knowing exists as the real ceiling for injury-management expertise.
- **Run group training sessions regularly:** Cross-reference Chapter 15's Tier 4 guidance; actually organize and lead recurring group physical training, not a one-time session, since consistency is what builds real community capability.

Community-Scale Practice

- **Build the labor rotation described in Chapter 15's Tier 4:** Chapter 15 calls for a documented, regularly updated community labor rotation schedule; Stage 4 is where you help design and run it, drawing on your Stage 3 rotation experience at household scale.
- **Match tasks to the full range of physical abilities:** Cross-reference Chapter 15's Tier 4 and Addendum H's (Access & Functional Needs) inclusive-planning guidance; genuine community-scale physical capacity coordination means real task-matching, not an all-or-nothing standard.
- **Plan for physical role succession:** Chapter 15's Tier 4 already names this; Stage 4 is where you actually identify and begin training who takes over labor-intensive community roles as current people age, are injured, or are lost.

Stage 4 Learning Path

Resource	Cost / Format	Notes
NASM or ACE Certified Personal Trainer full certification	$799–$3,499	The full, NCCA-accredited professional credential.
BOC Athletic Trainer (ATC) program information	Multi-year graduate program if pursued	bocatc.org. Know the pathway exists even if not personally pursuing it.
A shared community training space and equipment	Cost varies by community resources	Already cited in Chapter 15's Tier 4 equipment guidance.

Self-Check: Have You Actually Arrived?

The real test of Stage 4 isn't the certification; it's whether you've actually run recurring group training sessions that other people show up to consistently, and whether your community has a real, documented labor rotation you helped design, not just a plan on paper.

A Suggested Learning Sequence

The two tracks (strength/conditioning, injury management) build on each other closely here. As a rough guide, not a requirement:

- **Weeks 1–2:** Stage 1: perfect basic lifting technique, memorize the PEACE & LOVE protocol, understand effort pacing.
- **2–4 months:** Stage 2: build and follow a consistent functional training routine with a real log, progressively increase rucking load, get CPR/First Aid certified.
- **6–18 months:** Stage 3: begin personal trainer certification study, rotate labor tasks deliberately, teach correct form to another person.
- **Ongoing:** Stage 4: complete a personal trainer certification if programming for others is becoming a real skill, and start running recurring group training and community labor rotation.

At a Glance: Fitness Deep Dive

A single-page reference for planning purposes. This does not replace the detailed guidance above, and anyone with an existing medical condition or injury should adapt this plan with a doctor or physical therapist's input; use it to see how the four stages scale, and cross-reference against

Chapter 15's tiers, which describe what a household needs to do rather than how skilled it needs to be.

Stage	Focus	Key Milestone	Primary Resource
Stage 1: Foundations	Correct technique and injury-protocol knowledge, no routine yet	Can demonstrate correct hip-hinge lifting and explain PEACE & LOVE from memory	PEACE & LOVE protocol, CDC guidance
Stage 2: Applied Practice	Consistent functional routine and progressive load	2+ months of logged functional training; CPR/First Aid certified	Training log, rucking practice
Stage 3: Self-Sufficiency	Personal training study and real injury self-assessment	Studying toward NASM/ACE certification; taught correct form to another person	NASM/ACE coursework
Stage 4: Mastery & Teaching	Professional credential, community labor coordination	Runs recurring group training; helped design a real community labor rotation	NASM/ACE certification