

puttycise®

A New Twist In Occupational and Physical Therapy



Functional Grip



Joint Protection



Forearm Strengthening



Work Simulation



Fine Motor

KNOB TURN



Functional Simulations: Opening a door, tightening a jar, pushing a lid onto a container, tightening a valve, holding a glass of water, opening makeup containers

Joint Protection Techniques: Can teach using a “C” grip to avoid ulnar stress to MP joints and/or, using pressure proximal to the thumb IP joint with grip to decrease loading to the CMC joint.

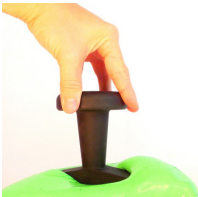
EXERCISE DESCRIPTIONS:



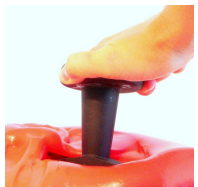
Standard Grip: Functional grip exercise. Helps to strengthen digit flexors, increase radial and ulnar wrist ROM, and simulates a natural function for improved digit coordination.



“C” Grip: Joint protection technique exercise. Teaches the use of larger joints and muscle groups when performing functional activity. Also promotes digit flexion with wrist flexion and extension.



Intrinsic Turn: With digits in an intrinsic plus position, use digit tips to produce a turn in either direction. This strengthens the intrinsic muscles of the hand frequently affected with median and ulnar nerve pathologies.



FPL Turn: Emphasize thumb tip to produce turning motion. This helps to promote FPL tendon glide and thenar IP joint ROM.



FDP/FDS Grip: Emphasize bending DIP and PIP joints when holding onto knob. This helps to promote FDP and FDS tendon glide, IP joint ROM, and EDC claw positioning.



Weight Bearing Push: Use palm to push knob into putty. This can be helpful with increasing wrist extension, providing a gradable weight bearing exercise, and providing desensitization to a sensitive palmar scar.

CAP TURN



Functional Simulations: Opening/closing a water bottle, turning on a stove, tightening a large bolt

Joint Protection Techniques: Can teach using a “C” grasp instead of a standard grip when opening a water bottle to avoid ulnar stress to MP joints and loading to the CMC joint.

EXERCISE DESCRIPTIONS:



Standard Turn: Push base into putty, hold cap with a standard grasp, turning through putty simulating opening a bottle cap.



Intrinsic Turn: Push base into putty, position the digits into an intrinsic plus position to turn tool through putty.



Tip Turn: Push base into putty, oppose thumb to selected digit to hold cap while turning tool through putty. Promotes thumb to digit ROM and improves FM coordination.



“C” Grip: Push base into putty, curl digits around the cap while turning through putty. Teaches joint protection technique through using an alternative hold/grasp to decrease repetitive ulnar stress on the MP joints and the CMC joint. Can also promote digit flexion and flexor tendon glide.



FPL Turn: Push base into putty, emphasize thumb tip to produce turning through putty. Promotes FPL tendon glide and thumb IP joint ROM.



FPL Push: Place base on a mound of putty, use thumb tip to push tool into putty. Simulates pushing a button. Promotes FPL tendon glide and thumb IP joint ROM.

PEG TURN



Functional Simulations: Turning a bolt/nut, pushing a button, picking up a pen, holding a straw, tightening a small knob

Joint Protection Techniques: Can teach using an intrinsic hold to decrease ulnar stress to MP joints and using proximal thumb/web space to produce hold rather than thumb tip to decrease CMC stress

EXERCISE DESCRIPTIONS:



Standard Turn: Push base into putty, use digits and thumb to turn peg in either direction simulating a standard turn of a comparable object.



Tip Turn: Push base into putty, place thumb and any other digit against peg to produce a turning motion. Works on coordination and isolated digit strengthening.



FPL Turn: Push base into putty, emphasize thumb tip to produce turning motion of peg. Assists with FPL tendon glide, increasing thumb IP joint ROM, and promotes sensory input to the thumb.



FPL Push: Place base onto a mound of putty, use thumb tip to push peg into putty.



FDP Push: Place base onto a mound of putty, use any digit tip to push peg into putty. Promotes FDP tendon glide and distal flexor strengthening.



FDS Push: Place base onto a mound of putty, use any digit at middle phalanx level to push peg into putty. Promotes FDS tendon glide, differential tendon gliding, and increases PIP ROM.



Peg Pull: Push one side of base into putty, using a lateral pinch or thumb to any digit tip to hold peg, pull peg through putty. Improves FM coordination and strengthening.



Peg Pull Up: Push full base into putty, using lateral pinch or thumb to any digit tip to pull up through putty. Can assist with thenar adduction ROM. Can teach joint protection technique using proximal thumb instead of distal thumb when holding peg to decrease CMC joint loading. Can also use intrinsic digit hold (between any digits) while pulling peg upward to strengthen intrinsic muscles and/or teach a joint protection hold technique.



Intrinsic Turn: Push base into putty, use an intrinsic digit hold between any two digits while turning peg through putty. Helps to strengthen intrinsic muscles and/or can be used to teach joint protection.

L-BAR



Functional Simulations: Pulling a vacuum, sweeping (functional grip with forearm pronation and supination), using a hammer, operating a throttle on a motorcycle

Joint Protection Techniques: Can teach using a neutral hold technique to avoid ulnar stress to MP joints and/or using larger joints to produce the movement to decrease loading to smaller joints.

EXERCISE DESCRIPTIONS:



Forearm Supination: Stabilize elbow at side, hold shaft of L-bar with a firm grip, place the tip into the putty, rotate forearm turning palm up.



Forearm Pronation: Stabilize elbow at side, hold shaft of L-bar with a firm grip, place the tip into the putty, rotate forearm turning palm down.



Radial Deviation: Hold shaft of L-bar starting in an ulnarly deviated position, place the tip into the putty, radially deviate wrist while pushing the tip through the putty.



Ulnar Deviation: Hold shaft of L-bar starting in a radially deviated position, place the tip into the putty, ulnarly deviate wrist while pulling the tip through putty.



Functional Pull: Start with a firm hold on the shaft of the L-bar, place the tip into the putty, pull the tip through the putty. Activates the entire upper extremity from the digit tips to the peri-scapular region.



Wrist Flexion: Start with L-bar base in the putty, grip the shaft, bend wrist into flexion rotating the base through the putty.



Wrist Extension: Start with L-bar base in the putty, grip the shaft, bend wrist into extension rotating the base through the putty.

KEY TURN



Functional Simulations: Turning a key, holding onto a paper folder, throwing a Frisbee, holding a clothespin open, pinching your spouse

Joint Protection Techniques: Can teach the use of an intrinsic hold instead of a lateral pinch to decrease repetitive stress to the CMC joint and ulnar deviation to the MP joints.

EXERCISE DESCRIPTIONS:



Standard Turn: Push base into putty, hold with thumb and first two digits to produce a functional turn simulating turning a key.



Lateral Pinch Turn: Push base into putty, hold with a lateral pinch to turn through putty. Combines lateral pinch with forearm rotation.



Intrinsic Plus Push: Place base onto a mound of putty, hold tool with digits in an intrinsic plus position, emphasizing straight IP joints and flexed MP joints. Push tool into putty while maintaining the intrinsic plus position. Strengthens intrinsic muscles. Good exercise post median and/or ulnar nerve pathology.



Intrinsic Turn: Push base into putty, hold tool between any two digits to produce turning through the putty. Can perform with the IP joints in flexion and/or full extension. Strengthens intrinsic muscles. Good exercise post median and/or ulnar nerve pathology.



Lateral Pinch Pull: Place one side of base into putty, use a lateral pinch grasp to pull tool through putty. Can be used to teach joint protection technique to utilize the proximal thumb instead of the thumb tip when pinching.



Intrinsic Pull: Place one side of base into putty, hold tool between any two digits, pull tool through putty. Can perform with IP joints in flexion and/or in full extension.

Puttycising According to Peripheral Nerves

Exercise	Median Nerve	Radial Nerve	Ulnar Nerve
Knob Turn Item 10-2810*			
Standard Grip	•		•
“C” Grip	•	•(Wrist Ext)	•
Intrinsic Turn	•		•
FPL Turn	•		
FDS/FDP Turn	•		•
Weight Bearing Push		•	
L-Bar Item 10-2811*			
Forearm Supination		•	
Forearm Pronation	•		
Radial Deviation	•	•	
Ulnar Deviation		•	•
Functional Pull	•	•	•
Wrist Flexion	•		•
Wrist Extensions		•	
Peg Turn Item 10-2812*			
Standard Turn	•		•
Tip Turn	•		•
FPL Turn	•		•
FPL Push	•		•
FDP Push	• (IF & MF)		• (RF & SF)
FDS Push	•		•
Peg Pull	•		•
Peg Pull Up	•		•
Intrinsic Turn	• (IF & MF)		• (RF & SF)
Key Turn Item 10-2813*			
Standard Turn	•		•
Lateral Pinch Turn	•		•
Intrinsic Plus Push	• (IF & MF)		• (RF & SF)
Intrinsic Turn	• (IF & MF)		• (RF & SF)
Lateral Pinch Pull	•		•
Intrinsic Pull	• (IF & MF)		• (RF & SF)
Cap Turn Item 10-2814*			
Standard Turn	•		•
Intrinsic Turn	• (IF & MF)		• (RF & SF)
Tip Turn	•		•
“C” Grip	•	• (Wrist Ext.)	•
FPL Turn	•		•
FPL Push	•		•

IF-Index Finger, MF-Middle Finger, RF-Ring Finger, SF-Small Finger

For use as a general reference only. No clinical research has been performed to support the above listed claims. Most exercises fall into multiple nerve categories. The exercises are categorized using the innervations of the primary muscle group to produce the movement.

Puttycise® Theraputty™ Exerciser Kits

Each kit includes:

- 4 Theraputty™ resistances (1 each as indicated below)
- Set of 5 Puttycise® tools
(1 Knob turn, 1 L-Bar, 1 Peg Turn, 1 Key Turn, and 1 CapTurn)
- Set of instructions and carry bag

	easy (tan, yellow, red, green)	medium (yellow, red, green, blue)	hard (red, green, blue, black)
6 oz. kit	10-2822	10-2828	10-2834
1lb. kit	10-2824	10-2830	10-2836
5 lb. kit	10-2826	10-2832	10-2838

* Tools can be purchased separately. See item numbers next to tool names.

Abbreviations

FPL: Flexor Pollicis Longus

FDP: Flexor Digitorum Profundus

FDS: Flexor Digitorum Sublimis

CMC: Carpal Metacarpal

MP: Metacarpal Phalangeal

PIP: Proximal Interphalangeal

DIP: Distal Interphalangeal

IP: Interphalangeal

EDC: Extensor Digitorum

Communis

FM: Fine Motor

ROM: Range of Motion

Applications

Puttycise® tools are intended for strengthening, increasing ROM, and improving functional coordination to the upper extremities. The variety and number of applications are limited only by one's creativity. Exercise programs can be custom designed by your licensed health care provider to meet strengthening and rehab needs.

Warning

Puttycise® tools can cause serious injury when not used properly. Use Puttycise® tools only upon the recommendation and under direction of a licensed health care professional. Puttycise® tools are designed to be a form of exercise equipment and should not be used for play purposes. Puttycise® should not be used by children unless under qualified adult supervision.