Name _____ Date _____ Visit ____ Tester _____ Time _____
Dominant limb - UE _____ LE _____ IMACS#_____

FUNCTIONAL INDEX 3

Borg CR 10

Muscle Group		Metronome (beats/min)	Repetitions	% / max repetitions	Muscle Exertion
Shoulder flexion (1 kg weight cuff)	Right	40			
Repetitions: 0 - 60	Left	40			
Head lift **Repetitions: 0 - 30**		40			
Hip flexion	Right	40			
Repetitions: 0 - 60	Left	40			

Comments for the Functional Index Test –

	Shoulder flexion		Head Lift	Hip Flexion	
	Right	**Left**		**Right**	**Left**
Limitation Active ROM	☐	☐	☐	☐	☐
Limitation of Passive ROM	☐	☐	☐	☐	☐
Used Alternate test position	☐	☐	☐	☐	☐
Subject fatigued with testing	☐	☐	☐	☐	☐
Poor effort	☐	☐	☐	☐	☐
Other (Specify)					

Formula for Total Score:

1- (Performed repetitions of shoulder flexion of dominant side + 2 × neck flexion repetitions + hip flexion on dominant side) /180

Or

2- (% of maximal repetitions of shoulder flexion of dominant side + % of maximal repetitions of neck flexion + % of maximal repetitions of hip flexion on dominant side) / 3

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Short Manual

Instruction to Patient:

- Perform as many repetitions of each muscle group task as you can or stop when reaching maximal number of repetitions. However, you decide when to stop due to muscle fatigue, pain or general fatigue.

Instructions to observer:

- Numbers of correct performed repetitions following five learning repetitions are registered for each task.
- If passive ROM is normal, but active ROM is limited the score is 0. Do not perform the task. If passive ROM equals active ROM perform the task within actual ROM.
- Each task is stopped if: a) the patient cannot keep up the given pace and is unable to correct within three repetitions, b) the patient starts to compensate and is unable to correct within three repetitions. After completing each task, the patient is instructed to rate perceived muscular exertion on the Borg CR-10 scale from 0-10 (0=no exertion, 10=maximal exertion).
- A metronome is used to standardize the movement pace of each task. A pace of 40 beats / minute results in 20 repetitions / Minute.

References

1. Ernste FC, Chong C, Crowson CS, Kermani TA, Mhuircheartaigh ON, Alexanderson H. Functional Index-3: A Valid and Reliable Functional Outcome Assessment Measure in Patients With Dermatomyositis and Polymyositis. J Rheumatol. 2021 Jan 1;48(1):94-100. doi: 10.3899/jrheum.191374. Epub 2020 Apr 15. PMID: 32295854; PMCID: PMC7572829.
2. Josefson A, Romanus E, Carlsson J. A functional index in myositis. J Rheumatol. 1996 Aug;23(8):1380-4. PMID: 8856617.
3. Borg GA. Psychophysical bases of perceived exertion. Med Sci Sports Exerc. 1982;14(5):377-81. PMID: 7154893.

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The Functional Index - 3

Alexanderson H et al 2025

- Disease-specific functional outcome assessing muscle endurance in polymyositis (PM) and dermatomyositis (DM).
- Equipment:

  -a chair without back or arm support
  -a bench with horizontal head support, a pillow
  -a 1-kg weight cuff
  -a digital metronome

Name _____ Date _____ Visit ____ Tester _____ Time _____
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Instructions

- Instruction to patient:
  - Perform as many repetitions of each task as you can or stop when reaching maximal number of repetitions. However, you decide when to stop due to muscle fatigue, pain or general fatigue.

- Instruction to observer:
  - Numbers of correct performed repetitions following five learning repetitions are registered for each task.
  - If passive ROM is normal, but active ROM is limited the score is 0. Do not perform the task. If passive ROM equals active ROM perform the task within actual ROM.
  - Each task is stopped if: a) the patient cannot keep up the given pace and is unable to correct within three repetitions, b) the patient starts to compensate and is unable to correct within three repetitions. After completing each task, the patient is instructed to rate perceived muscular exertion on the Borg CR-10 scale from 0-10 (0=no exertion, 10=maximal exertion).
  - A metronome is used to standardize the movement pace of each task.

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The Modified Borg CR-10 scale Perceived muscle exertion

0	Nothing at all
0.5	Extremely weak
1	Very weak
2	Weak (light)
3	Moderate
4	Somewhat strong
5	Strong (heavy)
6	
7	Very Strong
8	
9	
10	Extremely strong (maximal)

Borg GA 1982
Karolinska Institutet, Stockholm, Sweden

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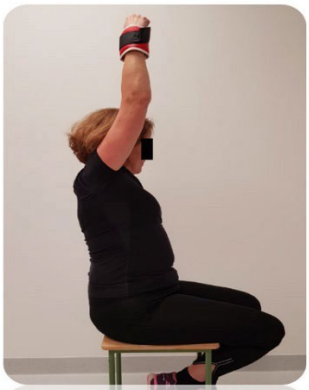
Shoulder flexion





Sit on a chair without back support with 1 kg weight cuff around wrist.

Start with the right arm. Perform as many repetitions as possible, then switch sides.

Pace: 40 beats / minute – 20 repetitions / minute Maximal number of repetitions: 60

Modified from online supplement to: Functional Index-3: A Valid and Reliable Functional Outcome Assessment Measure in Dermatomyositis and Polymyositis Patients. The Journal of Rheumatology. doi:10.3899/jrheum.191374

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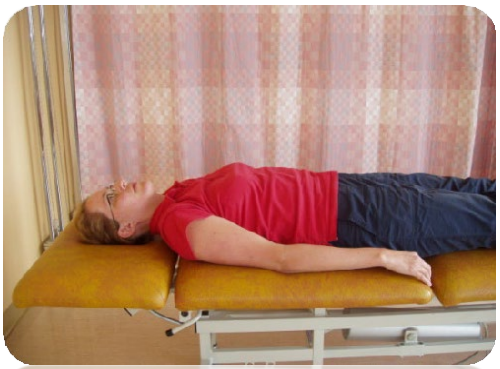
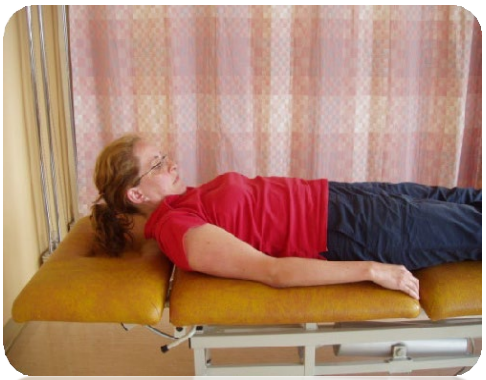
Head lift





Lying on a bench with horizontal head support. No pillow.

Lift the head as much as possible. Perform as many repetitions as possible.

Pace: 40 beats / minute = 20
repetitions / minute Maximal number
of repetitions: 30

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Hip flexion

Lying on a bench, pillow under head. Straight leg raise (heel 40 cm from bench). Perform as many repetitions as possible, then switch sides

Pace: 40 beats / minute = 20
repetitions / minute
Maximal number of
repetitions: 60