Armed and Ready

Case for Neutral Grip position and the effectiveness of performing roll outs with the Extreme ab and arm wheel:

Benefits: The neutral grip is biomechanically superior in comparison to the internally rotated(pronated) position commonly associated with regular barbell presses. This helps athletes prevent and rehabilitate shoulder injuries. The neutral hand position has more transference for football athletes and has some carry over to the bench press.

https://www..injoewetrust.com.au/2011/02/14/is-strongman-training-just-another-fad/

Neutral Grip easier on shoulder joints:

Pressing with the palms facing each other will create more space under the acromion process (the big bump on the top of your shoulder blade), making the lift easier on your shoulder joints. This works for the dumbbell bench press too. Craig Rasmussen Men's fitness, November 2009 (Article: It's all in your hands: Changing the position of the grip on your lift can yield serious muscle.).

http://findarticles.com/p/articles/mi m10608/is 9 25/ai n39635333/

Isometric exercise and static strength training:

During roll outs with the Extreme ab and arm wheel, the arm is in a lengthened position, subjecting the arm muscles to isometric/static strengthening.

Isometric exercises, also known as static strength training, involve muscular actions in which the length of the muscle does not change and there is no visible movement at the joint.

Some actions within a wide variety of sports require isometric or static strength. Examples include climbing , mountain biking and motocross (grip and upper body strength), Judo, wrestling, alpine skiing,(static strength required to stabilize the upper and lower body), shooting, gymnastics, and horseback riding.

http://www.sport-fitness-advisor.com/isometric-exercises.html

Brachialis, "workhorse of the elbow joint":

The Brachialis muscle is the strongest elbows flexor. The brachialis gets its name from its location (Latin for "arm") and because its strong flexion is often called "the workhorse of the elbow joint." During a dynamic elbow flexion, the biceps brachii is more readily activated than the brachialis while the brachialis is more readily activated during isometric elbow flexion.

http://www.yulisgym.com/enblog/wordpress/?p=156

Grappling, restraining moves enhanced greatly by strong elbow flexors:

For example, activation of the elbow flexors with the upper arms extended out in front and parallel to the floor, as seen in a grappling clinch, can elicit a differently elbow flexor recruitment pattern than that of a conventional biceps curl with arms directly down by the sides.

In grappling sports such as judo that have physical similarities to restraining tactics found in law enforcement, the elbow flexors can play a significant role in take downs, opponents positional control, submissions, and submission defense. This explains why studies show the Olympic-level judo competitors have greater elbow flexor cross-section areas, particularly in the brachialis, than university and state-level competitors in the same weight class (Shea and Poliquin, July 2011).

Ideally, the brachialis should be roughly 82% percent of the biceps brachii strength. Unfortunately this is not the case for most dedicated trainees, thereby leaving the door open for potential injury (Shea and Poliquin, 2011), and for that matter, sub-optimal performance.

http://www.charlespoliquin.com/ArticlesMultimedia/Articles/Article/658/The Strong Arm of the Law.aspx

Extended arm exercises "preferentially recruit" key elbow flexor muscles:

Due to both biomechanically efficiency and their roles as shunt or spurt muscles, the biceps and the brachialis are loaded and recruited differently at differing points in elbow flexion. During the outer range of the movement (arms virtually straight) the brachialis and the brachioradialis are preferentially recruited. Conversely during the inner range of movement (arms bent) the bicep is preferentially recruited.

Consider this choosing an exercise that mechanically loads either the inner or outer range will effectively load either the biceps or the brachialis and brachioradialis (Danbury, 2004).

The brachialis will have its fibres oriented optimally when the hand is in a semi pronated or neutral position (palms are facing each other). Lastly, the brachioradialis has the best line of pull during full pronation (palms facing down) (Danbury, 2004)

http://www.bodybuilding.com/fun/glen.14.htm