



The Battle of the Bulge: Understanding Post-Injury Weight Gain

Cindy Gray, Registered Dietitian
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Ellen eased herself into her favorite chair and began to tear open her treat for the afternoon. Ever since her accident in the spring, she began eating chocolate, though never having really craved it before. “It helps me!” she explains “It makes me feel good, and takes my mind off the pain, at least for a little while, then I try and do some house work.”

This treat has become an almost daily ritual for Ellen, as she seeks a way to deal with the discomfort of her back injury. She knows that she shouldn't be “indulging” so often, but the limitations of her injury have left her with few pleasures. Meanwhile, Ellen is becoming increasingly frustrated by the weight that she has gained since her injury. “I try to eat right, but before I know it I'm munching again!”

Ellen's case is a familiar one in dealing with injured workers. Eating habits often remain the same as when they were active on the job site, though the activity level has been markedly reduced through restraints of the injury. Boredom can then blur the perspective of “true” hunger, which leads to a constant inflow of calories via snacks throughout the day. Furthermore medication can complicate the picture by increasing appetite or generating a burning sensation in the stomach which will only subside with food.

From a theoretical standpoint, post-injury weight gain can be easily explained. A surplus of 500 calories per day equals a total of 3500 extra calories per week. This is the volume of energy required to produce 1 pound of fat. The 500 extra calories can come from a reduction in energy expenditure, an increase in caloric intake, or a combination of these two factors (which is most commonly the case). The reduced energy expenditure of an injured worker is an obvious factor. The sedentary nature of a worker with a back injury will reduce energy expenditure 30-80% from normal daily activity, depending on job demands of the position. This roughly translates into a 500-1500 calorie reduction in the energy used daily. Combine this with an unchanged volume of food consumed at meal times and/or an increase in snacking due to boredom, and you can see how quickly a surplus of 500 calories can be achieved.

Unfortunately, this scenario is all too often the case as an estimated 75% of injured workers gain weight post-injury. Personally I have seen anywhere from 5 to 100 pounds gain post-injury, the average worker gaining 30 pounds. This is a serious consideration, not only for health reasons such as increased risk of heart disease, diabetes, hypertension and the like, but also for the additional weight-bearing stress on the injury site. Every 10 pounds of weight gained abdominally translates into an



additional 100 pounds of stress on the lower back! Not only does this slow the rate of recovery, but it also increases the risk of re-injury if the weight is not successfully managed.

Losing weight is rarely as simple as “just eating less”. Our eating habits are strongly linked to social, cultural and emotional factors that complicate the math of merely subtracting calories. For anyone who has ever tried to lose weight, you know how difficult it can be. Especially when dealing with the stress of being off work and being limited in activity, it becomes a real challenge to tackle the task of weight loss (more specifically body fat loss). Often injured workers try extreme methods of weight control through very low calorie diets, since they know no other way to get results fast. Unfortunately diets typically do not work and individual inevitably ends up gaining back the weight, plus an additional few pounds to compound the situation.

This is starting to sound like a bleak picture, but there certainly is a successful means of treatment. Of course the first key to success is prevention. Often the injured workers I see have been carrying excessive weight prior to their injury, which in some cases may have precipitated the risk for injury to begin with. Offering nutrition services as part of a company’s wellness program is a common occurrence these days as corporations are starting to recognize the incredible value in investing in preventive measures. However in the unfortunate case of an injury, prevention of weight problems before they occur is also a wise consideration. This should be achieved through a qualified nutrition professional within the first few months after the injury. It is easier to prevent significant weight gain initially instead of trying to lose 25 pounds later! The benefits to the company as well as to the individual include reduced physical and emotional stress in promotion of a faster recovery.

For those workers who have already gained significant weight post-injury, a qualified nutrition professional (i.e. Registered Dietitian) will help the worker deal with the issues surrounding weight control and provide suggestions to meet the worker’s needs. This individual approach is key to successful weight management, as commercial weight loss programs do not deal with many of the worker’s underlying food issues and usually lead to only short term weight loss. The key to success is providing the client with nutrition education of food choices in addition to developing an understanding of the other factors influencing their eating habits.

Weight gain post-injury is a common occurrence amongst injured workers. As seen in Ellen’s case above, often we know what we are supposed to be doing, but our emotional side influences us to do otherwise. The plethora of emotional and physical stresses that an injured worker must deal with complicate the simple formula for weight control. The weight gain considered to be “inevitable” by many, is a condition that can be managed, and for the most part prevented, post-injury. Benefits to the worker and the organization speak loud and clear in preparing the individual for rehabilitation and returning to work. Proper nutrition and tuning into one’s true sense of hunger are the first tools to capitalize on in winning the war in the “battle of the bulge.”