

**“Platform for picking fruits from trees, boxes with material bottom, fixed boxes on a railing” (Picking fruits from trees)**

Task Description: PL\_6i (PL–Poland, 6 – Harvesting of tree fruit, outside, I–male, 44 years, 28 ha field space, which consists of 19,5 ha apples)

- Manual handling and carrying the fruit bucket during picking apples from a tree
- Task connected with carrying, lifting and moving a fruit bucket
- Task connected with repetitive tasks – fruits reaching, picking and putting into a bucket
- Picking apples from the higher part of tree requires body posture with hands above the shoulder-joints

Pictures: (all pictures AFTER)



1.



2.



3.



4.

Comments of the employee:

- Continuously repetition of the same gestures
- Work height not in accordance with work posture
- No helping devices available
- Loads too heavy, carrying distance too far, too low, ...

Comments of the employer: motivation regarding solution:

Working in position with hands above shoulder level, load of the upper limbs and lower back

**Comments of the employee:**

- “When I am picking apples from a higher level of tree I feel discomfort in upper limbs”
- “Discomfort in shoulders and lower back increases when I lift and carry heavy bucket with apples”
- “After all day work I feel strong pain in my lower back”

MSD risks:

- Posture
- Force
- Frequency/duration

Exposed areas:

- Neck/shoulder
- Lower back

Solutions:

Add a platform for picking fruits from trees. The platform is a kind of trailer pulled by a tractor. On platform is situated a big fruits crate in the centre. There is place for pickers from both sites of crate. Using a platform as support device workers can easily pick fruits from higher parts of trees. The railings are fixed around the platform to prevent the falls (pica. 1, 4).

People can get on the platform by ladders fasten from the back (pic.1). Orchard man picks fruits from trees and throws them to a small crate fixed on a railing. The fixed place of small crate avoids unnecessary twists of a trunk and reduce shoulders load caused of carrying basket with fruits. Used special, small fruits crate with material bottom during picking fruits on a platform helps to empty small boxes. Workers throw apples from small boxes to big crate in the centre of a platform (pic.2, 3). It is important to mention, that the orchard should be organise and trees plant in suitable distance from them to proper use of a platform. The platform is very new and very rare device in Polish orchards, mainly because of financial reasons. The orchard mans have to plan new orchards in advance.

**Comments after implementing good practice solution:**

- Performing this kind of task involves high load especially in shoulder, due to carrying heavy fruit buckets
- The picking fruits platform is a great device for picking fruits from trees (especially from higher parts of trees). It reduce carrying load of fruits bucket or box, which can be achieved fixing a fruits box on a platform railing.
- Using small box with material bottom allows you to reduce shoulders load during emptying box.
- Using a platform allows you to reduce shoulders load during picking fruits from higher part of tree and keep hands and shoulders below the shoulder-joints
- Advantage of using small and big crate is that it avoids the trunk twists during picking fruits