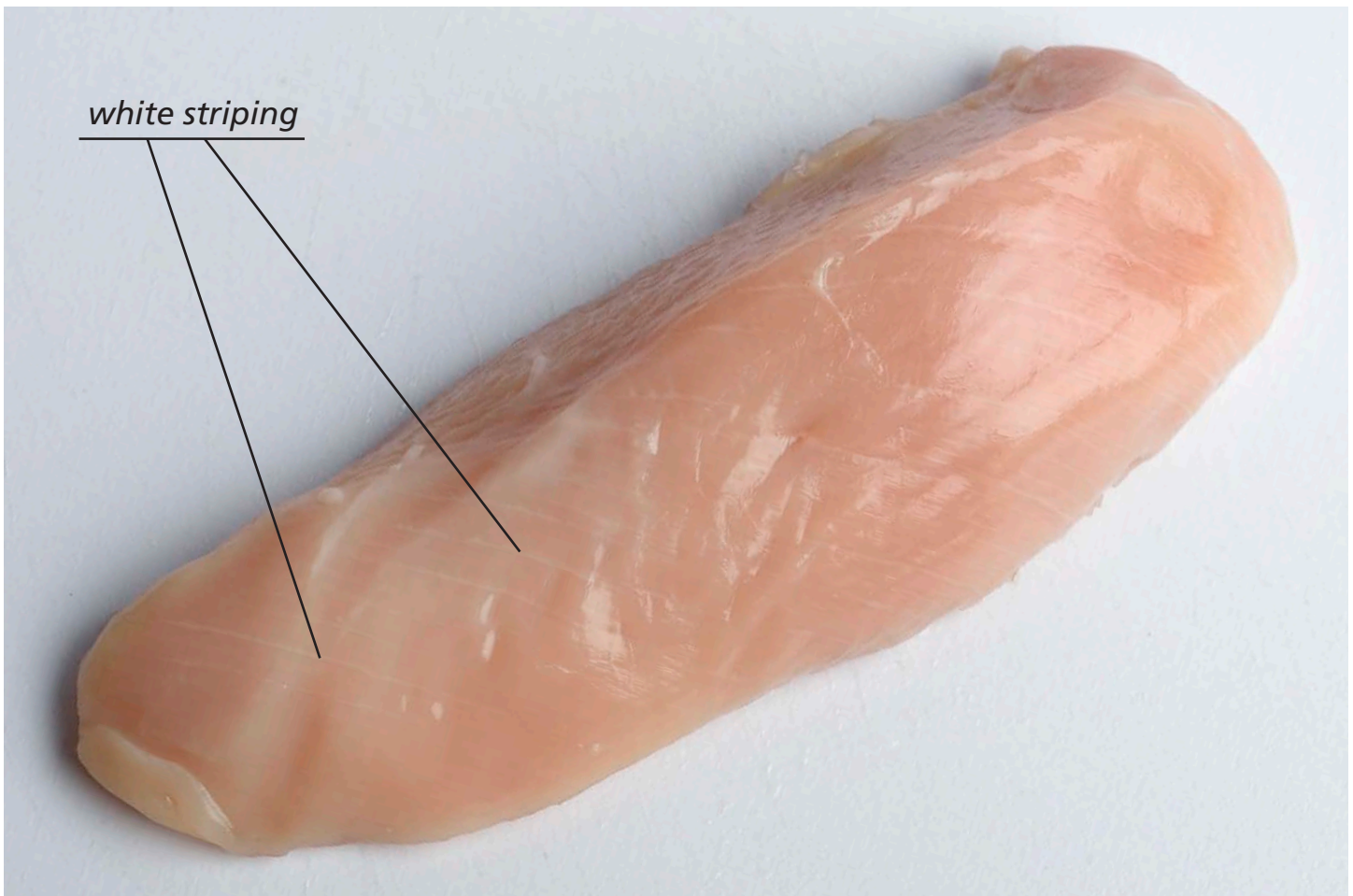


CAN YOU IDENTIFY WHITE STRIPING IN CHICKEN BREAST FILLETS?



Standard intensive chicken breast (Red Tractor certified)

The chicken breast above has white striping. The white stripes are muscle fibres which have degenerated or died as the chicken has grown. The muscle fibre has been replaced by fat and connective tissue.

1. How many stripes can you see in this chicken breast?

You can check your answers at the end of this worksheet.
A PowerPoint presentation showing complete chicken breast fillets is available at ciwf.org.uk/whitestriping.

2. Which of the chicken breasts below, labelled A-K, have white striping? Do you notice any patterns?



A. Standard intensive chicken breast (Red Tractor certified)



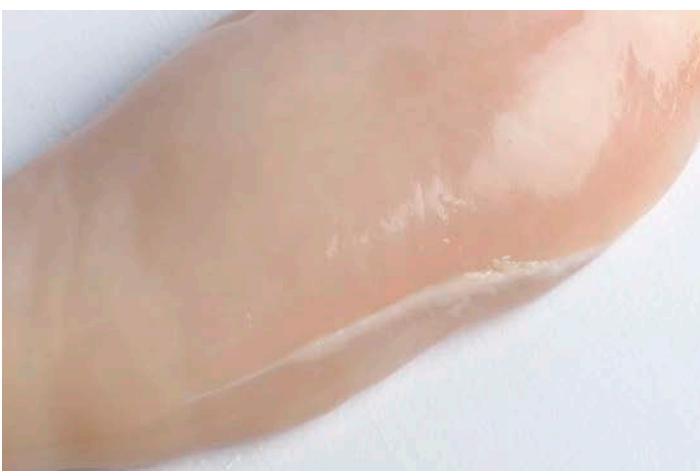
B. Standard intensive chicken breast (Red Tractor certified)



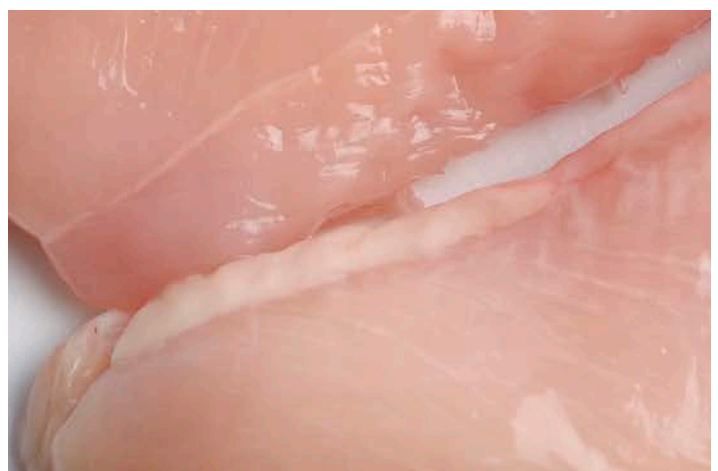
C. Free range chicken breast (Red Tractor certified)



D. Free range chicken breast (Red Tractor and RSPCA certified)



E. Organic chicken breast (OF&G and Red Tractor certified)



F. Standard intensive chicken breasts (Red Tractor certified)



G. Free range chicken breast



*H. Standard intensive chicken breast
(Red Tractor certified)*



*I. Organic chicken breast
(OF&G and Red Tractor certified)*



*J. Free range chicken breast
(Red Tractor & RSPCA certified)*



K. Pack of standard intensive chicken breasts (Red Tractor certified)

White striping happens in chickens that have been bred to grow very fast. Some muscle fibres run out of oxygen as a result of the fast growth. They degenerate or die, leaving a white stripe.

The samples above are not representative, but one recent survey found white striping in 85% of packets of standard chicken breasts, but in only 11% of packets of “higher welfare” chicken breasts such as RSPCA Assured, free range or organic.

Standard supermarket chickens are of fast growing breeds. All RSPCA Assured and most organic chickens are slower growing breeds. Free range birds may be of fast or slower growing breeds, but usually grow slower whichever. Red Tractor certify intensive, free range and organic birds.

3. Why would you expect higher welfare chickens to be less likely to have white striping?
4. How could you check whether higher welfare chickens do have less white striping?
5. What effect would you expect white striping to have on the nutritional value of chicken?

Further research:

1. Why have chickens been bred for fast growth?
2. How does fast growth affect the welfare of chickens?
3. How is chicken welfare improved in systems such as RSPCA Assured, Red Tractor indoor enhanced welfare, free range and organic?

More resources at:
ciwf.org.uk/education
ciwf.org.uk/whitestriping

Answers.

1. We can see nearly 30, though it is hard to be absolutely sure.
2. Fillets A, D, F (both), G (slight) and H and K (4 out of 5 fillets) have white striping.
3. Since the muscles grow more slowly in most higher welfare birds, they are less likely to run out of oxygen. So, they are less likely to degenerate and die.
4. Check packages of breast fillets from different systems to see if this is true.
5. Increase fat content and reduce protein.