## End of breastfeeding period triggers breasts to 'eat themselves'

When a woman stops breastfeeding, her breasts go from being full-time, milk-producing factories to regular appendages...Now a molecular switch has been identified that controls their transformation from milk secretors to cellular eaters that gobble up their dying neighbors.

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[O]nce women stop breastfeeding, these structures self-destruct...Here is the mystery: the body's immune cells usually remove dead and dying cells through...phagocytosis, yet...significant inflammation, pain and tissue damage...doesn't typically happen when breastfeeding ceases.

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To investigate, [Nasreen Akhtar at the University of Sheffield] deleted the gene for Rac1 in female mice; their first litter of pups survived...[but] subsequent litters of pups died. Further experiments revealed that in the absence of Rac1, dead cells and milk flooded the breasts, triggering swelling and a state of chronic inflammation, which impaired the mice's ability to regenerate their tissue and produce milk in later pregnancies.

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The findings could have consequences for understanding the development and progression of breast cancer...One theory is that inflammation during this period of remodeling after breastfeeding may fuel cancer growth.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Your boobs start to eat themselves after breastfeeding is over