

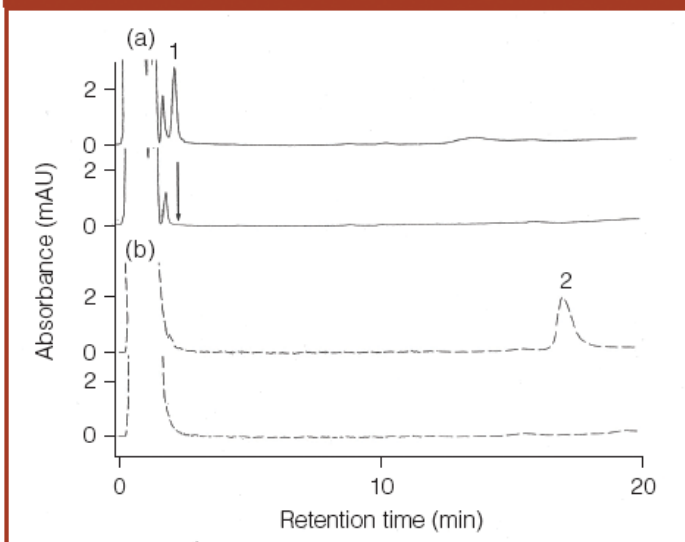
# A Non-hazardous Technique to Determine Penicillin G and Penicillin G Procaine in Beef

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**Figure 1:** Chromatograms obtained from the HPLC system. PDA detector set at (a) 205 nm or (b) 290 nm. Upper profile: a beef (cattle muscle) sample spiked with the target compounds (0.2 µg/g). Lower profile: (a) a blank beef sample. Peaks: PG (Retention time) = 2.4 min; 2 = PGp (17.3 min). An arrow in (a) lower profile indicates the peak of PG.



## Conditions

**Column** : Inertsil WP 300 C4 (5 µm, 100 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-05894  
**Eluent** : A) 0.04 mol/L phosphoric acid (pH 7.0)  
           B) Ethanol  
           A/B = 8/2, v/v  
**Flow Rate** : 1.0 mL/min  
**Col. Temp.** : 40 °C  
**Detection** : PDA 190-350 nm (detected at 205 and 290 nm)  
**Injection Vol.** : 20 µL  
**Sample** : beef  
**Analyte** : 1. Penicillin G (PG)  
           2. PG procaine (PGp)  
**URL** : <http://chromatographyonline.findanalytichem.com/lcgc/article/articleDetail.jsp?id=610621&pageID=1&sk=&date=> (last access date: Jan. 6, 2010)